Advisor Mainframe Features

System Guide



Notices

Copyright © 2001, 2002 Agilent Technologies, Inc. All rights reserved.

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

Manual Part Number

5971-5001

Edition

Third edition, February 2002

Software version 14.0.0

Printed in Singapore

Agilent Technologies, Inc. 5070 Centennial Boulevard Colorado Springs, CO 80919-2497 USA

Trademarks

Microsoft ® is a U.S. registered trademark of Microsoft Corporation.

Windows ® and MS Windows ® are U.S. registered trademarks of Microsoft Corporation.

Documentation Warranty

The material contained in this document is subject to change without notice. Agilent Technologies makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

Warranty

A copy of the specific warranty terms applicable to your product and replacement parts can be obtained from your local Sales and Service Office.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Product Support

Call your local Agilent Technologies representative, or:

Tel: 1-800-452-4844 Fax: 303-754-4802

or call your local Agilent Sales and Service Office.

Web:

http://onenetworks.comms.agilent.com/

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Certification

Agilent Technologies certifies that this product met its published specifications at the time of shipment from the factory.
Agilent Technologies further certifies that its calibration measurements are traceable to the United States National Institute of Standards and Technology (formerly National Bureau of Standards), to the extent allowed by that organization's calibration facility, and to the calibration facilities of other International Standards Organization members.

Restricted Rights Legend

If Software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as iCommercial computer softwareî as defined in DFAR 252.227-7014 (June 1995), or as a icommercial itemî as defined in FAR 2.101(a) or as iRestricted computer softwareî as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Agilent Technologiesí standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Before you use this instrument, read the "General Safety Precautions" and "Additional Safety Information" sections. Failure to comply with the precautions or with specific warnings in this book violates safety standards of design, manufacture, and intended use of this instrument. Agilent Technologies assumes no liability for the customer's failure to comply with these requirements.

General Safety Precautions

The following warnings and operating information are shown in English followed by the French translation.

<u>WARNING</u> This product is a Safety Class I instrument with a protective earth terminal.

WARNING For protection from electric shock hazard, power cord ground must not be defeated.

Operating Restrictions

The following general safety precautions must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions with specific warnings in this manual violate safety standards of design, manufacture, and intended use of this instrument.

Grounding

To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. The instrument is equipped with a three-conductor AC power cable compatible with an approved three-contact electrical outlet. The power jack and mating plug of the power cord must meet International Electrotechnical Commission (IEC) safety standards.

Environment

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

Service and Adjustment

Dangerous voltages exist within this instrument. Service and adjustment of this instrument is to be performed only by trained service personnel.

Do not replace components with the power cable connected. Dangerous voltages may

be present even when the power cable is disconnected.

Do not perform internal servicing or adjustment unless another person, capable of rendering first aid and resuscitation is present.

Hazardous Material

Should the LCD be damaged the liquid crystal material can leak. Avoid all contact with this material, especially swallowing. Use soap and water to thoroughly wash all skin and clothing contaminated with the liquid crystal material.

Unauthorized Service

The installation of substitute parts or the installation of any instrument modification not authorized by Agilent Technologies is specifically forbidden. The performance of such unauthorized service can negate the instrument warranty or any maintenance agreements.

Return the instrument to an Agilent Sales and Service Office for authorized service and repair.

MISE ENGARDE Cet appareil répond aux normes de la «Classe de sécurité l» et est muni d'un fil de mise à la terre pour votre protection.

MISE ENGARDE Pour prévenir les risques de choc électrique, la broche de mise à la terre du cordon d'alimentation ne doit pas être désactivée.

Restrictions d'utilisation

L'utilisateur se doit d'observer les mesures de précaution énumérées ci-dessous pour toutes les phases d'utilisation, de service et de réparation de cet appareil. Le fait de ne pas s'y conformer équivaut à ne pas respecter les mises en gardes spécifiques contenues dans ce manuel et constitue une violation des normes de sécurité relatives à la conception, la fabrication et l'utilisation prévue de cet appareil. La société Agilent n'assume aucune responsabilité envers un client qui manquerait de se conformer à ces exigences.

Mise à la terre

Afin de minimiser les risques de choc électrique, le chÀssis et le cabinet de l'appareil doivent être mis à la terre. L'appareil est équipé d'un cordon d'alimentation muni d'une fiche homoloquée à trois lames, compatible c.a. La prise murale et la prise femelle de la rallonge électrique doivent respecter les normes de sécurité de la «Commision électrotechnique internationale» (IEC).

Environnement

Ne faites pas fonctionner cet appareil en présence de gaz inflammables ou de vapeurs dangereuses. L'utilisation de n'importe quel appareil électrique dans ces conditions constitue un risque élevé pour votre sécurité.

Service et ajustement

Des «tensions dangereuses» résident dans cet appareil. Par conséquent, le service et l'ajustement doivent être effectués uniquement par une personne qualifiée.

Ne remplacez pas de composantes lorsque le cordon d'alimentation est sous tension. Il pourrait y avoir présence de «tensions dangereuses» même lorsque l'appareil est déconnecté.

Ne faites pas de service interne ou d'ajustement sauf en présence d'une autre personne, capable de prodiguer les premiers soins et de pratiquer la réanimation.

Matière dangereuse

Si l'affichage LCD est endommagé, la matière constituant les cristaux liquides peut se répandre. Eviter tout contact avec cette matière, et en particulier ne pas l'avaler. Utiliser de l'eau et du savon pour nettoyer soigneusement la peau et les vêtements qui auraient été contaminés par la matière constituant les cristaux liquides.

Service non autorisé

L'installation de pièces étrangères, ou toute modification apportée à l'appareil sans le consentement de Agilent est formellement interdit. Le fait de procéder à de tels modifications sans autorisation pourrait entraîner l'annulation de la garantie de l'appareil ou de tout contrat de service.

Pour un service et des réparations autorisées, retournez l'appareil à un point de vente et service Agilent.

Additional Safety Information

Flectric Shock Hazard

Do not remove the system covers. To avoid electric shock, use only the supplied power cords and connect only to properly grounded (3-pin) wall outlets.

Explosion Hazard

Do not operate in the presence of flammable gases.

Fire Hazard

For continued protection against fire hazard replace only with fuse of same type and rating.

Cleaning

To clean the product, use a damp cloth moistened with a mild solution of soap and water. *Do not* use harsh chemicals. *Do not* let water get into the product.

Product Damage

Do not use this product when the product shows visible damage, fails to perform, has been stored in unfavorable conditions, or has been subject to severe transport stresses.

Whenever this product has become damaged or wet, make the product inoperative and secure it against any unintended operation. Contact your nearest Agilent Sales office for assistance.



Instruction book symbol - the product will be marked with this symbol when it is necessary for the user to refer to the instruction book in order to protect against damage.



A product marked with this symbol indicates it is a laser product. When necessary, this symbol will be included in the instruction book for the user to refer to in order to protect against personal injury and/or correct product handling.



Indicates potential for electrical shock.

This is an Installation Category II product.

This is a Pollution Degree 2 product.

This product is designed for indoor use only.

FCC Part 68 Disclaimer

This equipment must not be connected to the telephone network unless it is connected through protective circuitry that is registered pursuant to Part 68 of the Federal Communications Commission rules. **ATTENTION.** USE OF THE SOFTWARE IS SUBJECT TO THE AGILENT TECHNOLOGIES SOFTWARE LICENSE TERMS SET FORTH BELOW. USING THE SOFTWARE INDICATES YOUR ACCEPTANCE OF THESE LICENSE TERMS. IF YOU DO NOT ACCEPT THESE LICENSE TERMS, YOU MAY RETURN THE SOFTWARE FOR A FULL REFUND. IF THE SOFTWARE IS BUNDLED WITH ANOTHER PRODUCT, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT FOR A FULL REFUND.

AGILENT TECHNOLOGIES SOFTWARE LICENSE TERMS

The following License Terms govern your use of the accompanying Software unless you have a separate signed agreement with Agilent Technologies.

License Grant. Agilent Technologies grants you a license to Use one copy of the Software. "Use" means storing, loading, installing, executing or displaying the Software. You may not modify the Software or disable any licensing or control features of the Software. If the Software is licensed for "concurrent use", you may not allow more than the maximum number of authorized users to Use the Software concurrently.

Ownership. The Software is owned and copyrighted by Agilent Technologies or its third party suppliers. Your license confers no title to, or ownership in, the Software and is not a sale of any rights in the Software. Agilent Technologies's third party suppliers may protect their rights in the event of any violation of these License Terms.

Copies and Adaptations. You may only make copies or adaptations of the Software for archival purposes or when copying or adaptation is an essential step in the authorized Use of the Software. You must reproduce all copyright notices in the original Software on all copies or adaptations. You may not copy the Software onto any public network.

No Disassembly or Decryption. You may not disassemble or decompile the Software unless Agilent's prior written consent is obtained. In some jurisdictions, Agilent's consent may not be required for limited disassembly or decompilation. Upon request, you will provide Agilent Technologies with reasonably detailed information regarding any disassembly or decompilation. You may not decrypt the Software unless decryption is a necessary part of the operation of the Software.

Transfer. Your license will automatically terminate upon any transfer of the Software. Upon transfer, you must deliver the Software, including any copies and related documentation, to the transferee. The transferee must accept these License Terms as a condition to the transfer.

Termination. Agilent Technologies may terminate your license upon notice for failure to comply with any of these License Terms. Upon termination, you must immediately destroy the Software, together with all copies, adaptations and merged portions in any form.

Export Requirements. You may not export or re-export the Software or any copy or adaptation in violation of any applicable laws or regulations.

U.S. Government Restricted Rights. The Software and any accompanying documentation have been developed entirely at private expense. They are delivered and licensed as "commercial computer software" as defined in DFARS 252.227-7013 (Oct 1988), DFARS 252.211-7015 (May 1991) or DFARS 252.227-7014 (Jun 1995), as a "commercial item" as defined in FAR 2.101(a), or as "Restricted computer software" as defined in FAR 52.227-19 (Jun 1987)(or any equivalent agency regulation or contract clause), whichever is applicable. You have only those rights provided for such Software and any accompanying documentation by the applicable FAR or DFARS clause or the Agilent standard software agreement for the product involved.

Microsoft Products. Microsoft Products are licensed to you under the Microsoft End User License Agreement (EULA) contained in the Microsoft documentation. Microsoft Products are covered under the Agilent Technologies warranty Statement supplied with the Agilent Products. The warranties in the Microsoft Documentation will not apply.

In This Manual

This manual provides information about the Advisor system hardware and software. Refer to the technology-specific Getting Started Guides for information relating to LAN, WAN, or ATM testing. Refer to the Operating System Guide for more information.

1 Mainframe Overview

This chapter provides overview information about the Advisor and available Interface Modules or Undercradles.

2 Getting Started

This chapter explains how to start using the Agilent Advisor. Information such as powering on the Advisor, starting measurements, and connecting peripheral devices to the Advisor are covered.

3 Installing/Removing Interface Modules

This chapter explains how to install and remove several different Interface Modules and Filler Panels available for use with the Advisor.

4 Attaching/Removing Undecradles

This chapter explains how to attach and remove undercradles that are used with the Advisor.

5 Recovering/Re-installing Software

This chapter has information about installing Windows from your hard drive, installing or upgrading the Advisor software, and viewing electronic documentation.

6 Using Modem & Ethernet PC Cards

This chapter explains how PC Card slots are used with the Advisor to increase the flexibility in the Personal Computer section and for enhanced I/O capability with the Advisor software.

A Specifications

This appendix lists the various specifications for the Agilent Advisor.

B Breakout Box, LEDs, and Connectors

This appendix gives you specific information about the Advisor's Breakout Box, LEDs and Connectors.

C Regulatory Information

This appendix contains all Declarations of Conformity statements for all hardware components, Laser Safety statements, and other regulatory information.

Contents

4		•
1	Mainframe	()verview

Introduction 14
Product Matrix 15

2 Getting Started

Powering on the Advisor 20
Starting the Advisor the First Time 21
Setting the Date and Time 22
Starting an Advisor Application 23
Connecting an External Display Monitor 24
Setting VGA Display Mode 25
Connecting a Printer 26

3 Installing/Removing Interface Modules

Installing Interface Modules 28
Removing Interface Modules 29

4 Attaching/Removing Undercradles

Tools Required 32

Attaching an Undercradle 33

Removing an Undercradle 34

Using the Empty J2295A Undercradle 35

Disassembling the J2295A Undercradle 35

Installing Printed Circuit Cards 36

Re-assembling the J2295A Undercradle 37

5 Recovering/Re-installing Software

Installing Windows 98 From the Hard Drive Image 40 Installing/Upgrading Advisor Software 42

42 Viewing Electronic Documentation **Using Modem & Ethernet PC Cards** 6 Introduction 44 Installing and Removing PC Cards 45 To Install a PC Card To Remove a PC Card 47 Software Configuration PC Card Modems 50 **Specifications Physical Specifications** 52 **Operating Conditions** J2300D/E Specifications 54 J3446D/E Specifications 56 The Keyboard and Button Mouse 58 **Breakout Box, LEDs, and Connectors** B RS-232/V.24 Breakout Box and System LEDs 62 Mark/Space Indicator 63 Source Voltage Active Interface LEDs 64 Lead Status LEDs 65 V-Series Interfaces 66 RS-232C/V.24 67 RS-449 68 V.35 69 Interface Pin-Out Comparison 70 AUI — 100Base-T 72 MII — 100Base-T 73 MDI — 100Base-TX

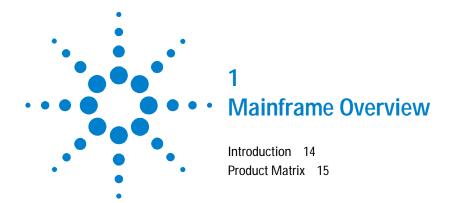
C Regulatory Information

Declarations of Conformity J1990A Full Duplex Ethernet Tap J2294C CEPT-E1 DB9 & RJ-45 Interface Module J2294D, J2296D, J2298D E1 and T1 Interface Modules 78 J2300D Advisor WAN 79 J2300E Advisor WAN 80 J2306B, J2309B LAN Ethernet and Eth/Token Ring Undercradle J2307A LAN Token Ring Undercradle J2524A FDDI Undercradle J2527A TIMS Undercradle 84 J2900A High Speed Acquisition Undercradle J2901A Gigabit Ethernet Undercradle J2904B, J2293B/94B/96B/97B/98B/99B ISDN/BERT Interface Modules 87 J2905B ISDN BRI S/T and U Interface Module 88 J2908A DDS 4-Wire Interface Module J2909A ATM DS-3/E3 Interface Module J2912A ATM OC-3c/STM-1 Interface Module 91 J2912B ATM OC-3c/STM-1 Interface Module 92 J2913A ATM 155-UTP Interface Module 93 J2913B ATM 155-UTP Interface Module 94 J2914A STM-1e Interface Module 96 J3444A Fast Ethernet LAN Undercradle J3445A 100Base-FX Interface Module 97 J3446D Advisor LAN 98 99 J3446E Advisor LAN J3447A LAN 100BaseFX Interface Module 100 J3759A DS-3/E3 Cells & Frames Interface Module 101 J3759B DS-3/E3 Cells & Frames Interface Module 102 J3762A HSSI Interface Module 103 J3762B HSSI Interface Module 104 J3763A, J3764A ATM 622 Undercradle and OC-12/STM-4c Interface Module 105 J3766A ATM25 Interface Module 106 J4630A VQT Undercradle 107 J4646A/47A and J4648A/49A E1 and T1 ISDN PRI Interface Modules

Contents

J5457A High-Speed V-Series Interface Module 109
Laser Safety Statements 110
Safety Information for Laser Source Modules 111

Index



Introduction

The Agilent Advisor models J2300D, J2300E, J3446D, and J3446E are designed for testing your network needs in combination with available WAN, LAN, ISDN, and ATM Interface Modules or Undercradles. With the Advisor, you can look at decoded protocol information as it is traveling across a network so you can identify network problems quickly.

This manual provides information about the Advisor system hardware and software. Refer to the technology-specific Getting Started Guides for information relating to LAN, WAN, or ATM testing. Refer to the Operating System Guide for more information.

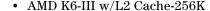
Model "D" Advisors

The J2300D and J3446D Advisors have:

- AMD K6-2 chip
- 300 MHz processor
- 128 Mbytes of PC memory
- 1.44 MB flexible disk drive
- 4 GB (or larger) hard drive

Model "E" Advisors

The J2300E and J3446E Advisors operate at a higher speed and have more memory. These Advisors have:



- 400 MHz processor
- 256 Mbytes of PC memory
- 1.44 MB flexible disk drive
- 6 GB (or larger) hard drive

Each mainframe has a PC Card Type III slot, serial port, parallel port, external monitor port, microphone input jack, and an external audio output jack. The mainframes have available options of: a TDK 56.6 Kbps Modem PC Card and/or a Xircom Combination Modem and Network Interface CardBus Card.

There are two speakers in the mainframes for sound output. Volume control is included in the software. External speakers or a headset can be plugged into the jack labeled, "PHONES".



Product Matrix

Undercradles	J2300D/J2300E WAN Mainframes	J3446D/J3446E Fast Ethernet LAN Mainframes	
J2295A	Х	Х	
J2306A Ethernet LAN	X	X	
J2306B Ethernet LAN	X	X	
J2307A Token Ring LAN	X	X	
J2309A Ethernet/TR LAN	X	X	
J2309B Ethernet/TR LAN	X	X	
J2524A FDDI	X	X	
J2527A TIMS	X		
J2900A High Speed Acquisition	X	X	
J2901A	X	X	
J3444A Fast Ethernet	X	X	
J3763A	X	X	
E4594A TELCO	X		
E6323A E1 TELCO	X		
X =Supported Now		·	

1 Mainframe Overview

	J2300D/J2300E Mainframes or J2900A Undercradle		
Interface Modules	WAN	ATM Application	
J4646A/47A ISDN PRI E1	Х		
J4648A/49A ISDN PRI T1	X		
J2293B PRI-E1	X	X	
J2294B PRI-E1	X	X	
J2294C PRI-E1	X	X	
J2294D T1/E1	X	X	
J2296B PRI-E1	X	X	
J2296D E1	X	X	
J2297B PRI-E1	X	X	
J2298B PRI-T1	X	X	
J2298D T1/E1	X	X	
J2299B PRI-T1	X	X	
J2904B ISDN BRI S/T	X		
J2905B ISDN BRI S/T & U	X		
J2908A DDS 4-Wire	X		
J2909A ATM DS-3 ¹		X	
J2911A ATM J2		X	
J2912A ATM OC-3		X	
J2912B OC-3		X	
J2913A ATM-UTP ¹		X	
J2913B ATM-UTP		X	
J3759A ATM DS3/E3	X	X	
J3759B ATM DS3/E3	X	X	
J3762A WAN HSSI	X		
J3762B WAN HSSI	X		
J3766A ATM 25.6M		X	
¹ Only used in a J2300D or J23	00E mainframe.	l .	

Advisor Mainframe Features System Guide

	J3446D/J3446E Fast Ethernet LAN Mainframe
J3447A 100BaseFX	Х

Interface Module	J2300D/J2300E WAN Mainframes and J3446D/J3446E LAN Mainframes with J3444A Undercradle
Media Independent Interface	X
J3445A Fiber Interface	х

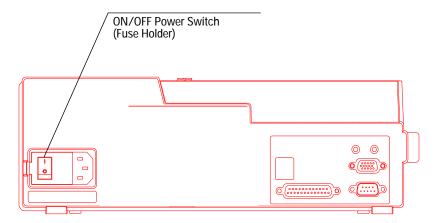
1 Mainframe Overview



Starting the Advisor the First Time 21
Setting the Date and Time 22
Starting an Advisor Application 23
Connecting an External Display Monitor 24
Setting VGA Display Mode 25
Connecting a Printer 26

Powering on the Advisor

Connect the AC power cable (either 115V or 230V) as shown below. The mainframe automatically determines whether the power connection is 115V or 230V. To start the mainframe, turn the power on. The ON-OFF power switch is located on the left side adjacent to the power cable connector.



If the mainframe will not power-up, check the following:

- · Power cable connections are good
- · AC power is available at the outlet
- Examine the fuse



Each mainframe is shipped with a three-conductor power cable that grounds the Advisor when it is connected to an appropriate power outlet. Do not operate the Advisor without ground protection.

Starting the Advisor the First Time

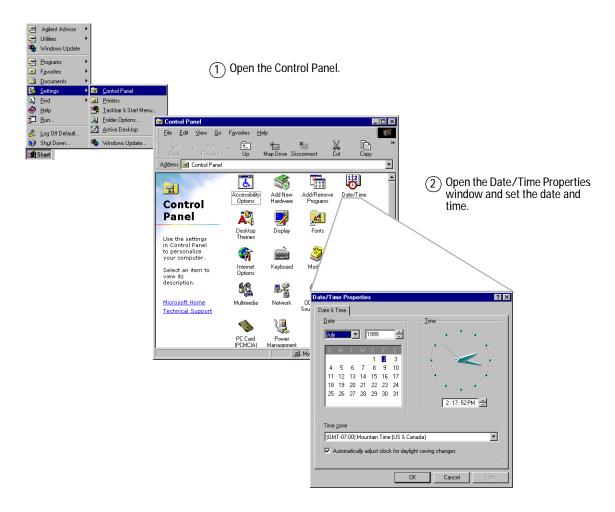
Windows and Advisor software are already installed on the hard drive at the factory. The software is included with your shipment for recovery/re-installation only.

When you first power up the Advisor, you will need to enter some initial Microsoft Windows setup information.

- 1 Plug in the Advisor and turn it on (the On/Off switch is located next to the power cord on the left side of the unit).
- 2 Follow the instructions on the screen to enter a first and last name, and to accept the Microsoft Windows license agreement.
- **3** Enter the Microsoft Windows authenticity product ID# affixed to the mainframe.
- 4 When the Date/Time Properties dialog is displayed, set the date and time, select the time zone, and press Enter.
 - The time and date features are used for many of the applications and reports generated by the Advisor. It is important to set your local time and date when you receive your Advisor. Setting the time and date also updates system configuration files. The time and date are maintained even when the Advisor is off.
- 5 After the Windows setup is complete, shut down and power off the unit to update setup files and to prepare the Advisor for running measurements.

Setting the Date and Time

The time and date features are used for many of the applications and reports generated by the Advisor. It is important to set your local time and date when you receive your Advisor. Setting the time and date also updates system configuration files. The time and date are maintained even when power to the Advisor is off



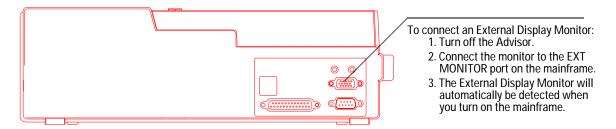
Starting an Advisor Application

All of your applications can be started from Windows desktop. Depending on the type of mainframe you have and any undercradles or modules you have installed, the available applications will be displayed on the Start menu. Refer to the technology-specific (ATM, WAN, LAN) Getting Started Guides for specific startup instructions.



Connecting an External Display Monitor

You can connect an external display monitor to the Advisor.



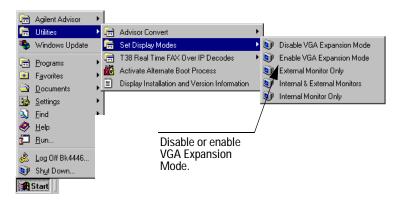
With an Active SVGA display, the external monitor display is SVGA resolution 800x600.

If you want to adjust the display to a higher resolution you must explicitly change the display mode to External Monitor Only.



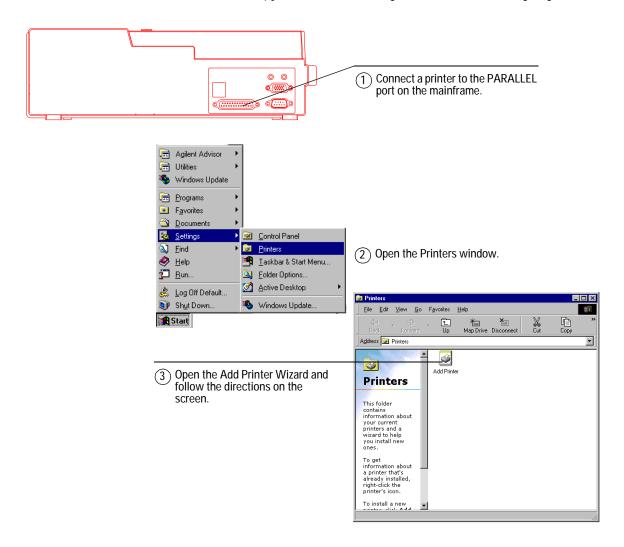
Setting VGA Display Mode

You can either disable or enable VGA Expansion Mode under Utilities on the Start menu.



Connecting a Printer

You can connect a printer to the Advisor so you can print files, help topics, and measurements results. The default printer selection is No Printer. If you want to use a printer with your Advisor, you must select the printer driver and output port.





Installing Interface Modules

There are several Interface Modules and one Filler Panel available for use with the Advisor. The Filler Panel acts as a cover for the Interface Module slot when no Interface Module is installed.

You can install interface modules directly into the mainframe or into a compatible undercradle. Refer to Chapter 1 for supported Interface Module configurations with the Advisor and Undercradles.

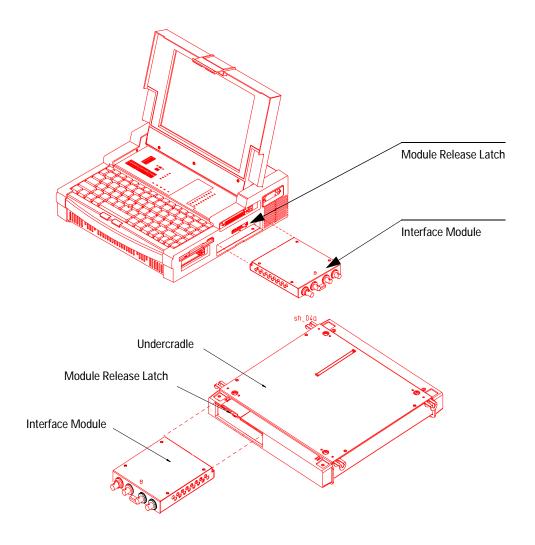
CAUTION

Make sure you turn off the power and unplug the Advisor before attaching or removing undercradles.

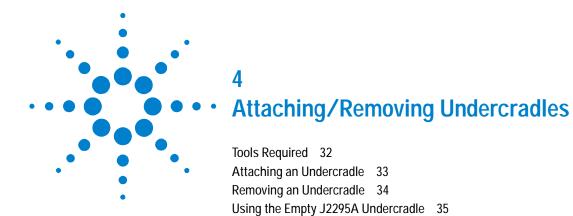
- 1 Make sure the Module Release Latch is in the Install/Remove Position.
- 2 Slide the Interface Module or Filler Panel into the opening.
- 3 Push it firmly into place until it is seated and the Module Release Latch moves to the Locked Position. The Module Release Latch does not move when you install a Filler Panel. You will need to push the Module Release Latch to move the latch into its locked position.

Removing Interface Modules

- 1 Press the left end of the Module Release Latch (labeled "PUSH TO UNLOCK"), then slide the latch toward the left (Install/Remove Position).
- 2 Pull the Interface Module or Filler Panel out of the Advisor.



3 Installing/Removing Interface Modules



Tools Required

Depending on which undercradle you have ordered, the following equipment/tools are included to attach and remove the undercradle:

- 4 rubber feet
- 4 Torx screws (for the undercradle)
- 2 Torx screws (not needed for J2300D/E and J3446D/E)
- 1 Right side endcap expander
- 1 Torx wrench
- 1 Small flat endcap
- · 1 connector board
- 2 Grounding Strips (not needed for J2300D/E and J3446D/E)

NOTE

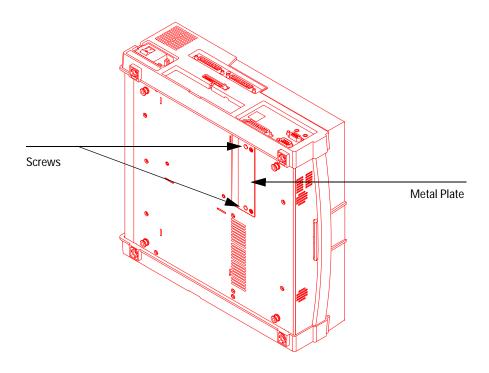
Any E4594A Telco Undercradle without the new E4594A Serial number label that includes the phrase "INT 15," must be modified at your nearest Service Center in order to operate correctly with the J2300D/E and J3446D/E Advisors.

Attaching an Undercradle

CAUTION

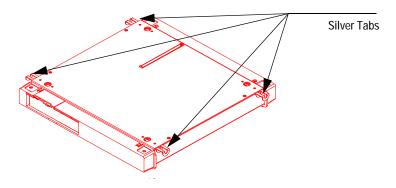
Turn off the power and unplug the Advisor before attaching or removing undercradles.

- 1 If the metal plate (on the bottom of the Advisor) is covering the opening for the Undercradle to attach to, remove the two screws from the metal plate. Use the wrench provided in the miscellaneous parts kit (or a T10 Torx screwdriver) to remove the screws.
- 2 Slide the metal plate over to the next set of drilled holes in the metal plate and re-attach it (with the same screws you removed in the previous step). This will leave an opening into which you can install your connector board. Ensure that the screws are flush with the metal plate.



4 Attaching/Removing Undercradles

- **3** Insert the connector board into the slot uncovered by the metal plate.
- **4** Make sure all four silver tabs on the top of the undercradle are pulled out.
- 5 Place the mainframe on top of the undercradle, matching the connector on the bottom of the mainframe to the connector on the top of the undercradle.
- **6** Push in the four silver tabs, locking the undercradle to the mainframe.



Removing an Undercradle

- 1 Turn off the power and unplug the Advisor.
- **2** Pull out the four silver tabs on the front and the back of the undercradle.
- **3** Lift the Advisor away from the undercradle.

Using the Empty J2295A Undercradle

The empty Undercradle (J2295A) can be used with the Advisor so you can add one or two of your own ISA compatible printed circuit cards to customize your Advisor.

Disassembling the J2295A Undercradle

CAUTION

Turn off the power and unplug the Advisor before attaching or removing undercradles.

- 1 If already attached, remove the undercradle from the Advisor. Refer to "Removing an Undercradle" on page 34.
- **2** Turn the undercradle upside down, with the four black feet facing up.
- 3 Carefully remove the four black rubber feet using a small flat screwdriver to pull them out of their seating.
- 4 Remove the four screws using a #10 Torx driver.
- **5** Turn the undercradle over.
- **6** Remove the eight screws (four flat-head and four pan-head) from the top of the undercradle.
- 7 Slide the two plastic endcaps off both sides, and lift off the top of the undercradle.

Installing Printed Circuit Cards

You can install up to two printed circuit cards in the undercradle — full-length or smaller. For full-length cards, you will need to use the endcap expander. For smaller cards or only one card, you can use the flat endcap.

CAUTION

Be sure to follow Electro-Static Discharge (ESD) procedures when handling any cards.

- 1 Gently lift each corner of the connector board to disconnect it from the standoffs.
- **2** Turn the connector board over and fasten the card(s) in the slots provided.
- **3** Press the connector board onto the standoffs. The cards should be underneath the connector board as you secure it.
- 4 Included with your undercradle are seven foam blocks. You can use them to help stabilize your PC Cards inside the undercradle.
- 5 Remove the protector sheet and place the foam block where needed. It should adhere to the sheet metal and prevent movement of the cards.

Re-assembling the J2295A Undercradle

- 1 Place the top back on the undercradle, aligning the slot in the top with the Advisor connector. Fasten with the four flat-head screws.
- 2 On the side nearest to the Advisor connector, slide the left side piece into place and secure it with four pan-head screws (two on the top and two on the bottom). If you are only installing one printed circuit card, insert the small flat endcap in the left side piece before you put it on the undercradle.
- 3 If you are installing full-length printed circuit cards, insert the endcap expander into the right side before you place it on the undercradle. If you are installing smaller printed circuit cards, insert the flat metal endcap in the right side before you place it on the undercradle.
- 4 Slide the undercradle right side piece into place and secure it with four pan-head screws (two on the top and two on the bottom).
- 5 Turn the undercradle over and replace the four black rubber feet into the foot indentations.

4 Attaching/Removing Undercradles



Installing Windows 98 From the Hard Drive Image

The Windows 98 operating system image is included on a separate partition on the hard drive for recovery. It is recommended you back up this image to a network server or a CD so you can easily recover the operating system in the event of a hard drive failure.

Note, the image on this hard drive is not compatible with the following D series mainframes:

J2300D serial numbers below US41030101

J3446D serial numbers below US41040101

If you have older D series mainframes, you need to keep the backup images you made for those mainframes. Use this manual for instructions to install the operating system from the hard drive image.

When you install Windows 98 Second Edition, you will be reformatting the C: drive. You will lose all installed applications, customized tests, and any data files that you have created.

NOTE

Make sure that you back up ALL files you want to save before you continue. This process does not install the Advisor software.

System Requirements to install Windows 98 SE

- A D-model Advisor with a 2 GB or larger hard disk
- Backup media archived on a separate partition, as configured from the factory. Each Advisor shipped from the factory has two partitions in the hard drive. The second partition contains the Windows recovery image.

FAT32 support

The external hard drives, used for Option 506, do not support FAT32. If you use FAT32 on an Option 506 unit, you will encounter severe hard drive problems.

Option 506

Option 506 supports three different external hard drives. Check the ARCHIVES folder on the Advisor software CD if you need to recreate disks that can be used with your Option 506 external hard drive.

NOTE

When creating an Option 506 disk set, make sure all the disks you create are copied from the set of images in a single folder. These disks cannot be mismatched, or problems will be seen.

Items Required to Upgrade

- Advisor Installation Preparation Disk for HD Recovery
- Sufficient blank 3.5" 1.44 MB diskettes to back up existing applications, tests, or other data (prior to re-installing Windows 98)
- BIOS Upgrade Disk, if your BIOS is not current

Read through this entire section before you begin installing Windows 98.

- 1 Remove all peripheral hardware (including undercradles) you can leave a serial mouse attached.
- 2 If you have Advisor software loaded and are in the Alternate Boot Mode, you should return to Windows and properly shut down before continuing.
- 3 Insert the Advisor Installation Preparation Disk for HD Recovery into the floppy drive.
- 4 Turn on the Advisor and wait while the installation process sets up and surveys your system. This takes several minutes.
- 5 Follow the instructions on the screen until Windows setup is complete (the registration process is completed and the Windows desktop is displayed).
 - a If necessary, you will be prompted to upgrade the BIOS using the BIOS Upgrade Disk. Follow the on-screen prompts, answering "Y" when prompted to flash the BIOS.
 - b Once the BIOS upgrade is complete, but before rebooting the system, remove the BIOS Update Disk from the floppy drive and re-insert the Installation Preparation Disk.
 When ready, press any key to reboot the system, as prompted by the BIOS Upgrade utility.

NOTE

As the system is rebooting, press and hold the Del key until the BIOS setup screen is displayed. In the "Default" box, double-click Optimal settings, click "Yes" when prompted to confirm this selection. Press the Esc key to display the Exit menu. Click "Save Changes and Exit" to save the configuration and restart the Advisor.

6 From the Start menu, select Shut Down. In the Shut Down Windows dialog, select Shut down and then click OK.

Installing/Upgrading Advisor Software

Refer to the installation instructions on the inside of the Advisor CD envelope.

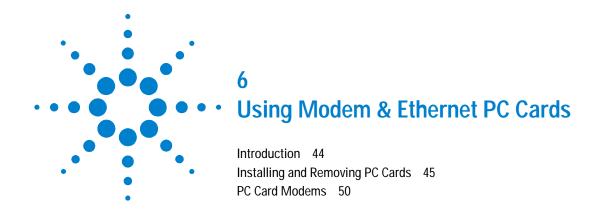
Once you have installed Advisor software, refer to the technology specific Getting Started guides (ATM, WAN, LAN) for information to help you start the application.

Viewing Electronic Documentation

In addition to the paper documentation shipped with your order, all the Advisor documentation is also included in PDF format on the:

- Software CD so you can select the documentation (in addition to software applications) to install on your hard drive, and view or print later.
- Electronic Documentation CD so you can view the documentation from the CD on any PC.

Refer to the electronic documentation viewing instructions on the inside of the Advisor CD envelope.



Introduction

The Personal Computer Memory Card International Association (PCMCIA) has created a standard for credit card size devices with memory, mass storage, and I/O functionality. The standard makes compatibility possible by defining mechanical, electrical, and software requirements.

The purpose of the PC Card slots are to increase the flexibility in the Personal Computer section of the instrument. The primary use of this flexibility is for enhanced I/O capability with the Advisor software. This includes functions such as a modem, a LAN interface, and a CD-ROM Drive.

While integrated I/O is the primary focus for the PC Card slot, it can also serve other purposes. Other PC Card solutions include removable mass storage, speech, paging, encryption, global positioning, and even additional protocol testing.

Compatibility

The Advisor conforms to PC Card specification 2.10. Each slot is capable of receiving one Type I or Type II card. A single Type III or larger card may be inserted into the bottom slot only. The following types of cards are compatible with the Advisor:

- ATA Drive
- Audio
- Ethernet/Modem Combo
- Fax/Modem
- Network Interface
- SCSI Host Adapter
- CD ROM

Installing and Removing PC Cards

Before you install a PC Card, make sure the PC Card slot is active by selecting: | Start | Settings | Control Panel | and then double-click on the PC Card (PCMCIA) Wizard. If the slots are active you will see the PC Card (PCMCIA) Properties window. If the slot is not active, you will see the PCMCIA Welcome Window. To activate the PC Card slot: at the Welcome Window, press Enter to continue, press Enter to accept default PC Card drivers, then press Enter to close the PC Card Wizard.

If you are using a supported Modem or NIC PC Card, the drivers for these devices are already installed on your Advisor. If you are using an "unsupported" device, follow the manufacturers instructions to install the necessary drivers.

Do not load the card vendor's socket or card services software into the Advisor LAN or ToolKit WAN (DOS applications)

NOTE

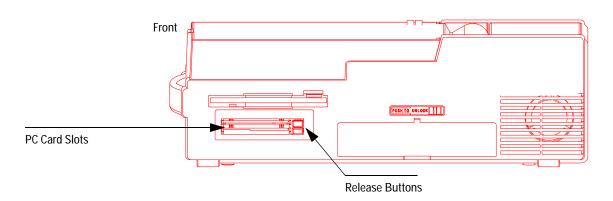
The configuration will be different in some ways between the WAN and LAN software. Refer to the Advisor WAN — High Speed Toolkit User's Guide (under Configuring a Slave) for configuring the software for WAN PC Card operation. This guide is distributed as a PDF file on the Advisor CDs.

To Install a PC Card

- 1 Slide the PC Card in the PC Card slot until you feel some resistance. All PC Cards are keyed for correct installation. The card's label will typically face up or will explain which side is up.
- **2** Push firmly, but gently, to ensure a good connection. Never attempt to force the card into position.
- 3 Listen for an audible double-beep tone within five seconds, confirming that the system recognizes a PC Card has been inserted.

NOTE

When using the alternate boot selection (in MS-DOS mode) or when you have a Gigabit Ethernet undercradle attached, install your PC Card before you turn on the Advisor.



4 To verify that the system has properly identified the card, check the system properties of the installed PC Card. On the desktop, right click on My Computer and select Properties. From the System Properties window, select the Device Manager tab, select your PC Card device category, and double-click on the PC Card description. From there you can check either General or Resources information.

To Remove a PC Card

- 1 From the Windows desktop, select the PCMCIA icon (located in the Notification area near the clock).
- 2 Highlight and click the Stop PCMCIA card description. A message box will be displayed indicating that you can now safely remove the PCMCIA Card.
- **3** Push the release button on the side of the PC Card slot and pull out the card.

You can also exit any applications, properly shut down Windows, and then remove the PC Card.

NOTE

When using the alternate boot selection (MS-DOS mode) or when you have a Gigabit Ethernet Undercradle attached, turn off the Advisor before removing the PC Card.

Software Configuration

Windows — with a PC Card

- If a PC Card uses an interrupt, Windows will generally assign interrupt 15 to the card if it is available. If this interrupt is not available, Windows will assign the next available interrupt.
- If a PC Card uses I/O Addresses, Windows will dynamically allocate the next free range to the card. If the PC Card is a modem card, Windows must select an I/O Addresses range of COM 1, COM 2, COM 3, or COM 4. Generally, Windows will use COM 2. A Network PC Card will normally default to 130-13F.
- PC Card Modems are generally located at I/O address 02F8-02FF(COM2), with interrupt=11.
- ATA disks use available I/O space and reserve no interrupt.

MS-DOS — with a PC Card

The only PC Cards supported in the Toolkit are the U.S. Robotics Megahertz PC Card Modem, and the TDK Systems PC Card Modem.

The default modem for mainframes is the TDK Modem. If you want to change the default modem for Toolkit, select | Start | Utilities | Select Modem for Toolkit Remote |.

A point enabler is used to activate each modem for use with the Toolkit Remote package. Both modems are set for I/O space COM4, Interrupt 11, and memory region CC000-CCFFF.

PC Functions	Interrupt	Analyzer Functions	Interrupt
Keyboard Controller	1	Ethernet or Ethernet/Token Ring Undercradle	10
Programmable Interrupt Controller	2	FDDI Advisor Undercradle	3, 5, 9, 10, 11, 12, or 15
COM 1	4	High Speed Acquisition Undercradle	none
Sound Hardware	5	TIMS Undercradle	15
Flexible Disk Controller	6	T1 Telco Undercradle	15
LPT1/Parallel	7	E1 Telco Undercradles	15
Real Time Clock	8	Gigabit Undercradle	11
Button Mouse	12	J3446D/E	9, 10, or 12
Numeric Data Processor	13	J3444A Undercradle	3, 5, 9, 10, 11, or 15
Hard Disk Controller	14		
Available to PC Card in Advisor WAN	9,10,11		
Available as Undercradle in Advisor WAN	9,10,11,15		

I/O Address	System/Analyzer Function	I/O Address	System/Analyzer Function
000-00F	DMA Controller Register	300-301	Sound H/W
020-021	PIC #1	320-32F	WAN Low Speed Hardware
040-043	Prog. Interval Timer Reg	330-331	T1 Telco Undercradle
060-	Keyboard Controller	330-33F	TIMS Undercradle
061-	System Speakers	376-377	IDE
064-	Keyboard Controller	378-37F	LPT1/Parallel
070-	RTC Index & NMI Mask	388-38B	Sound H/W
071	RTC Data Port	3B0-3BB	Video Registers
080-09F	DMA Page Register	3C0-3DF	Video Registers
0A0-0A1	PIC #2	3E0-3E1	PC Card Controller
0C0-0DF	DMA Controller Register	3E8-3EF	COM3
0F0-0FF	Numeric Data Processor	3F0-3F7	Flexible Disk Controller, Primary
110-12F	ATM Analyzer in Undercradle	3F8-3FF	COM1
150-16F	WAN/ATM Analyzer Hardware	B2-B3	Power Management
170-177	IDE	CF8-CFF	Chipset Configuration
1F0-1F	IDE	C2F0	LAN Hardware
200	Sound H/W	D2F0	LAN Hardware
220-22F	Sound H/W	E2F0	LAN Hardware
2E8-2EF	COM4		
2F0-2F1	LAN Analyzer Hardware		
2F8-2FF	COM2		

PC Card Modems

If you are using a supported modem, the modem software is already installed. You will need to set your Dialing Preferences for your modem to operate properly.

If you are using an unsupported modem, Windows will prompt you to insert the manufacturer's diskette if necessary.

- 1 Set these preferences by selecting: | Start | Settings | Control Panel | Modems |.
- 2 Under General Modems Properties, select Dialing Properties. This opens another folder called, My Locations. The default area code from the factory is set at area code 719 and country USA. Change these and any other settings to meet your requirements.

NOTE

The modem requires an analog phone line and is not compatible with typical digital PBX systems.

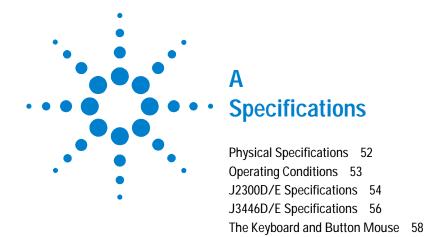
The modem can be connected to a standard telephone line through an RJ-11 phone jack.

Transmission rates for the modem are up to 56.6 kbps (14.4 kbps for fax). The modem and fax operate with standard AT commands.

The modem is compatible with many commercially available software applications. Check the vendor's specifications to see if a particular application is compatible with the modem's capabilities.

NOTE

Be sure to choose a country using the country selection with your international modem, the same selection will apply for any MS-DOS mode program that uses a modem.



A Specifications

Physical Specifications

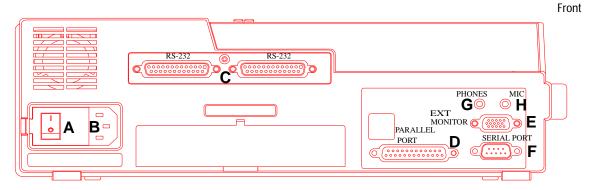
Weight	J2300D Mainframe J2300E Mainframe	6.45 kg (14.2 lbs) 6.45 kg (14.2 lbs)
	J3446D Mainframe	6.81 kg (15 lbs)
	J3446E Mainframe	6.81 kg (15 lbs)
	J2900A Undercradle	2.1 kg (5 lbs)
	J2901A Undercradle	2.1 kg (5 lbs)
	J2295A Undercradle	1.04 kg (2.3 lbs)
	J2306B Undercradle	1.40 kg (3.1 lbs)
	J2307A Undercradle	1.40 kg (3.1 lbs)
	J2309B Undercradle	1.40 kg (3.1 lbs)
	J2524A Undercradle	2.0 kg (4.4 lbs)
	J2527A Undercradle	1.49 kg (3.3 lbs)
	J2900A Undercradle	2.0 kg (4.4 lbs)
	J3444A Undercradle	2.08 kg (4.6 lbs)
	E4594A Undercradle	1.97 kg (4.35 lbs)
Dimensions	J2300D, J2300E, J3446D, J3446E Mainframe	11.44H x 31.43W x 31.75D cm (1.75H x 12.375W x 12.5D inches)
	Undercradles (exceptions noted)	3.7 cm (1.5 inches) height for undercradle
	J2901A Undercradle	1.75H x 31.11W x 29.84 cm (4.0H x 12.375W x 12.5D inches)
	J2900A High Speed Undercradle J3444A Undercradle J2527A TIMS Undercradle	4.76 cm (1.875 inches) height for undercradle
	E4594A TELCO Undercradle	5.72 cm (2.25 inches) height for undercradle
Display	The standard display for the J2300D, J2300E, J3446D, and J3446E Mainframes is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA display.	

Operating Conditions

Temperature	Operating Non-operating	+5°C to +40°C (+41°F to +104°F) -25°C to +60°C (-13°F to +140°F)
Humidity	Operating Storage	20% to 80% relative humidity, non-condensing to 40°C 10% to 90% relative humidity to 60°C
Altitude	Operating Storage	4,575 meters (15,000 feet) 15,250 meters (50,000 feet)
Power Requirements	External	100 to 120 VAC, 50-60 Hz, 1.5A 200 to 240 VAC, 50-60 Hz, 1.0A

Specifications Α

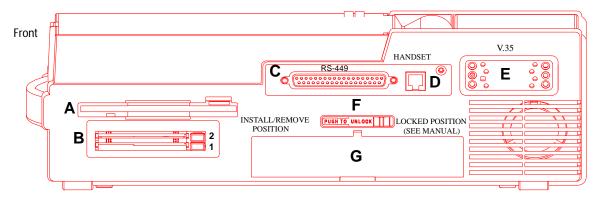
J2300D/E Specifications



Left Side of J2300D/E Advisor

- A On-Off Switch
- B Power cable receptacle C Two RS-232/V.24 connectors
- **D** Parallel Port
- E External Monitor
- F Serial Port
- **G** Headphones
- H Microphone

Refer to Appendix B for connector pinouts.



Right Side of J2300D/E Advisor

A 3-1/2 inch high density flexible disk drive **B** Dual PC Card slots

C RS-449 connector

D Handset connector

E V.35 connector

F Module Release Latch for Interface Modules

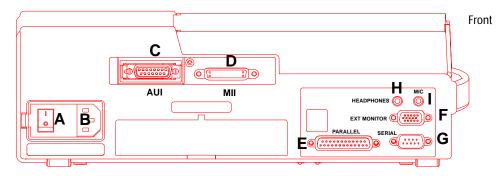
G Interface Module slot

Refer to Appendix B for connector pinouts.

Refer to Chapter 1 for the matrix of interface modules and undercradles that you can use with the J2300D/E.

Specifications Α

J3446D/E Specifications

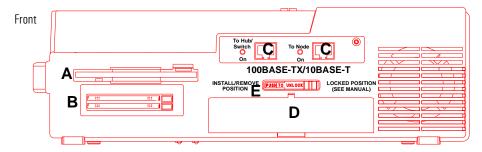


Left Side of J3446D/E Advisor

- A On-Off Switch
- B Power Cord receptacle
 C Ethernet (AUI)
 D Fast Ethernet (MII)
 E Parallel Port

- F External Monitor
- **G** Serial Port
- H Headphones I Microphone

Refer to Appendix B for connector pinouts.



Right Side of J3446D/E Advisor

A 3 1/2 inch high density flexible disk drive B PC Card Slot

C 100Base-TX/10Base-T Ethernet connectors

D Interface Module slot

E Module Release Latch for Interface Modules

Refer to Chapter 1 for the matrix of interface modules and undercradles that you can use with the J3446D/E.

Refer to Appendix B for connector pinouts.

A Specifications

The Keyboard and Button Mouse

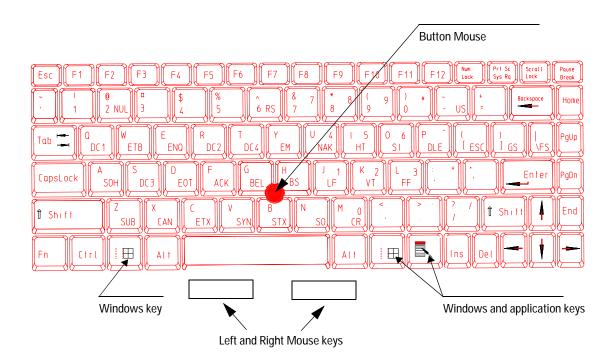
The keyboard includes 88 keys with the integrated Button Mouse. The left and right mouse keys are located below the space bar on the chassis of the Advisor. The Button Mouse responds quickly to pressure and the cursor will move in the direction and with the desired speed equal to pressure applied to the Button Mouse.

The keyboard has three extra keys — two Windows keys and one application key. The two Windows keys will automatically display the Start Menu, and the application key responds the same as pressing the right mouse key on any selected area of focus. There are 12 function keys.

NOTE

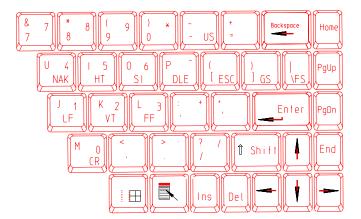
If you need to replace the keyboard button cover of your keyboard, please call you local sales representative. The replacement part number is 4320-0445.

To use the control characters, hold down the CTRL key and press the control character you want. The control characters and their corresponding keys are shown in the following figure.



A Specifications

By pressing the Num Lock key, you can use the numeric keypad. The following figure shows the numeric keypad locations and numeric equivalents.



Keyboard Operation LEDs

Located above the keyboard are the following LEDs that show keyboard functions when they are active.

- Power On
- Caps Lock
- · Num Lock
- Scroll Lock
- · Hard Disk



B Breakout Box, LEDs, and Connectors

RS-232/V.24 Breakout Box and System LEDs 62

Lead Status LEDs 65

V-Series Interfaces 66

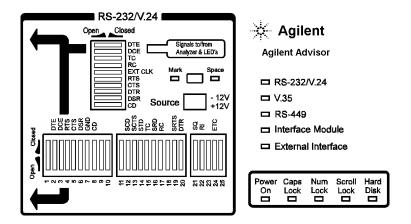
AUI — 100Base-T 72

MII — 100Base-T 73

MDI — 100Base-TX 74

RS-232/V.24 Breakout Box and System LEDs

The Advisor gives you breakout box and jumpering capabilities for RS-232/V.24 circuits. The figure below shows the breakout box and its associated connections. Note that the large black arrows point to the RS-232/V.24 test connectors on the side of the Advisor. The rearward connector is the preferred test input for most tests. The forward connector should only be used when signals need to be isolated by the rocker switches or cross-connected by way of the switch jacks and jumper leads.



All 25 leads are accessible for jumpering on either side of the breakout switches (the lateral switch bank numbered 1 through 25.) If you want to monitor or simulate on auxiliary data channels or to observe control signals other than RTS, CTS, DTR, DSR and CD, you can perform the appropriate transpositions by opening the corresponding switches and jumpering between the appropriate leads. To do so, connect the circuit under test to the Advisor through the forward RS-232 test connector and perform the necessary transpositions over the lateral switch bank.

The vertical switch bank provides hardware isolation of incoming or outgoing data and control signals for special purpose testing. An example would be using the Advisor to supply terminal generated control signals without conflicting

with existing data signals. In this case, you would want to open the DTE switch to isolate the circuit being tested from the internal data transmitter.

NOTE

Pin 1 of the RS-232 test port is Frame Ground or Protective Ground. It is connected to the case of the Advisor and, through the third wire of the power cable, to Ground. If you have a data circuit that requires isolation of Frame Ground, use the forward RS-232 test port and open switch 1 on the lateral switch bank

Pin 7 of the rearward RS-232 test port is Signal Ground, and it is isolated from Frame Ground by 100 KOhms to minimize ground-loop problems.

In monitor mode, the inputs to all V-Series signal receivers represent only 1/5 of a standard load, minimizing circuit loading effects. In Simulating and BERT testing modes, the transmitters are configured with normal source impedance.

Mark/Space Indicator

You can use the Mark/Space Indicator to test the state of any circuit on an RS-232/V.24 interface. The Mark/Space Indicator has two test jacks, which are connected together electrically. To do this, simply jumper from any test jack on either of the lateral or vertical switch banks to either of the Mark/Space Indicator jacks and observe the results. If the incoming signal is more positive than +3.0 volts, the Space LED lights. If the incoming signal is more negative than -3.0 volts, the Mark LED lights. If the Mark and the Space LEDs both light up, the incoming signal is actively changing states. This is normal for data and clock signals, but indicates a problem for control signals.

NOTE

EIA-232D (Formerly RS-232C) specifications consider interface signals in the range of -3.0 to +3.0 volts to be indeterminate (or not valid). Consistent with this recommendation, the Mark/Space Indicator treats signals in this range as "not present" and gives no indication.

Source Voltage

You can hard-wire any signal or control line as On or Off by jumpering it to the Source jacks. The rearward three jacks are connected together electrically and supply -12 volts through a 1 KOhm resistor. The forward three jacks are connected together electrically and supply +12 volts through a 1 KOhm resistor. If you connect a signal or control line to the -12 volts supply it creates a Mark or Off state and if you connect it to the +12 volts supply it creates a Space or On state.

Active Interface LEDs

The following is a list of the five LEDs that indicate which interface is currently configured:

- RS-232/V.24
- V.35
- RS-449
- · Interface Module
- · External Interface

CAUTION

Do not connect more than one Advisor port at a time. The V.35, RS-449, RS-232, and External ports are not independent of one another. Connecting more than one port at a time can cause unreliable results.

Lead Status LEDs

On the right side, rearward of the keyboard, are ten pairs of LEDs that show a real-time indication of lead status for all of the interfaces. These LEDs also indicate data, clock and control information for the V-Series interfaces. The following list provides information on the meaning of the lighted LEDs:

Left columnRedMark State for Data, Off State for Control SignalsRight columnGreenSpace State for Data, On State for Control SignalsBoth LEDslightedActive signal togglingNeither LEDlightedNo signal present

When the selected interface is RS-232/V.24, the left column LEDs light when the signal level is more negative than -3.6 volts and the right column LEDs light when the signal level is more positive than +3.6 volts. This is a safety margin of 20% above EIA-232D minimum signal requirements of -3.0 and -3.6 volts. If the circuit under test is lighting the proper Advisor LEDs, then there is enough signal present to allow any EIA-232D/RS-232 conforming device to receive the data and control signals. If the circuit under test cannot light these LEDs, the signal levels are too low for reliable reception.

For the Interface Modules, the left column shows the state of the Equipment (or user) signal and the right column shows the state of the Line (or central office) signal. Alarm and Error indications cause their respective red LEDs to light. The green Signal LEDs light if a signal is present. If there is no signal present, the topmost red LED lights to indicate a loss of signal.

These LEDs can provide a visual indication as to whether a V-Series device is physically DTE or DCE. First connect the Advisor to the device under test and configure it for the Monitor mode. If either the DTE/SD Mark or Space LED lights, the device under test is DTE. If the DCE/RD Mark or Space LED lights, the device under test is DCE. If the Advisor is to Simulate a device under test, it must complement the device's physical characteristic. If the device is DTE, the Advisor must be DCE and vice versa.

V-Series Interfaces

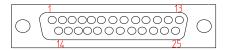
V-Series Functions

Function	RS-232	V.35	RS-449
Send Data	DTE	SD	SD
Receive Data	DCE	RD	RD
DTE/Send Timing (DCE)	TC	SCT	ST
DCE/Receive Timing (DCE)	RC	SCR	RT
DTE/Send Timing (DTE)	ETC	SCE	TT
Request to Send	RTS	RS	RS
Clear to Send	CTS	CS	CS
Data Terminal Ready	DTR	DTR	TR
Data Set/Mode Ready	DSR	DSR	DM
Carrier Detect/Rec. Ready	CD	CD	RR

V-Series Functions for High Speed External Pods Only

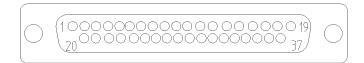
Function	RS-232	V.35	RS-449
Local Loopback (Drv)		LLB	LLB
Remote Loopback (Drv)		RLB	RLB
Test Mode (Mon)		TM	TM

RS-232C/V.24



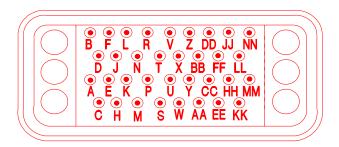
Pin	CCITT Circuit	Circuit Function	Pin	CCITT Circuit	Circuit Function
1	101	Protective Ground	14	118	Secondary Transmitted Data
2	103	Transmitted Data	15	114	Transmission Signal Element Timing (DCE Source)
3	104	Received Data	16	119	Secondary Received Data
4	105	Request to Send	17	115	Receiver Signal Element Timing (DCE Source)
5	106	Clear to Send	18		Unassigned
6	107	Data Set Ready	19	120	Secondary Request to Send
7	102	Signal Ground (common return)	20	108.2	Data Terminal Ready
8	109	Received Line Signal Detector	21	110	Signal Quality Detector
9		(Reserved for Data Set Testing)	22	125	Ring Indicator
10		(Reserved for Data Set Testing)	23	111/112	Data Signal Rate Selector (DTE Source)
11		Unassigned	24	113	Transmit Signal Element Timing (DTE Source)
12	122	Secondary Received Line Signal Detector	25		Unassigned
13	121	Secondary Clear to Send			

RS-449



Pin	Circuit Name	Pin	Circuit Name
1	Shield	20	Receive Common
2	Send Timing	21	Spare
3	Spare	22	Send Data
4	Send Data	23	Send Timing
5	Send Timing	24	Receive Data
6	Receive Data	25	Request to Send
7	Request to Send	26	Receive Timing
8	Receive Timing	27	Clear to Send
9	Clear to Send	28	Terminal in Service
10	Local Loopback	29	Data Mode
11	Data Mode	30	Terminal Ready
12	Terminal Ready	31	Receiver Ready
13	Receiver Ready	32	Select Standby
14	Remote Loopback	33	Signal Quality
15	Incoming Call	34	New Signal
16	Select Frequency/Signal Rate	35	Terminal Timing
	Selector		
17	Terminal Timing	36	Standby Indicator
18	Test Mode	37	Send Common
19	Signal Ground		

V.35



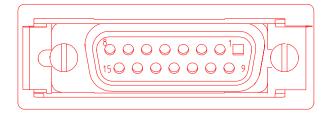
Pin	Circuit Name
Α	Chassis Ground
В	Signal Ground
С	Request to Send
D	Clear to Send
E	Data Set Ready
F	Receive Line Signal Detect
Р	Transmit Data (A)
R	Received Data (A)
S	Transmit Data (B)
Т	Received Data (B)
U	Terminal Timing (A)
V	Receive Timing (A)
W	Terminal Timing (B)
Χ	Receive Timing (A)
Υ	Transmit Timing (A)
AA	Transmit Timing (B)

Interface Pin-Out Comparison

RS-232C/CCITT V.24	CCITT V.35	RS-449
25 Pin	34 Pin	37 Pin
1–Protective Ground	A–Protective Ground	1–Shield 37–Send Common
2–Transmitted Data	P-Transmit Data (A) S-Transmit Data (B)	4–Send Data (A) 22–Send Data (B)
3–Received Data	R-Received Data (A) T-Received Data (B)	6–Received Data(A) 24–Received Data (B)
4–Request to Send	C–Request to Send	7–Request to Send (A) 25–Request to Send (B)
5–Clear to Send	D-Clear to Send	9–Clear to Send (A) 27–Clear to Send (B)
6-Data Set Ready	E-Data Set Ready	11-Data Mode (A) 29-Data Mode (B)
7–Signal Ground	B–Signal Ground	19–Signal Ground
8–Carrier Detect	F–Receive Line Signal Detect	13-Receiver Ready (A) 31-Receiver Ready (B)
9–Reserved for Testing	m–Reserved for DSU Testing	
		20-Receive Common
10–Reserved for Testing		10-Local Loop (A) 14-Remote Loop (B)
11–Unassigned		3–Spare 21–Spare
12-Sec. Carrier Detect		32-Select Standby
13-Sec. Clear to Send		
14–Sec. Transmitted Data		
15-Transmit Clock (DCE Source)	Y–TX Signal Element Timing o–TX Signal Element Timing	5-Send Timing (A) DCE Source 23-Send Timing (B) DCE Source
16-Sec. Received Data		

RS-232C/CCITT V.24	CCITT V.35	RS-449
25 Pin	34 Pin	37 Pin
17–Receive Clock	V–RX Signal Element X–RX Signal Element	8–Receive Timing (A) 26–Receive Timing (B)
18–Unassigned		18–Test Mode (A) 28–Term in Service (A) 34–New Signal
19–Sec. Request to Send		
20-Data Terminal Ready		12-Terminal Ready (A) 30-Terminal Ready (B)
21–Signal Quality Detector		33–Signal Quality (A)
22-Ring Indicator		15-Incoming Call (A)
23–Data Signal Rate Selector		2–Signaling Rate Indicator (A)
		16-Signaling Rate Selector (A)
24–Transmit Clock (DTE Source)		17–Terminal Timing (A) 35–Terminal Timing (B)
25–Busy		36–Stand by Indicator

AUI — 100Base-T



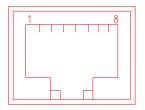
Pin	Circuit Name	Use
1	CI-S	Control In circuit Shield
2	CI-A	Control In circuit A
3	DO-A	Data Out circuit A
4	DI-S	Data In circuit Shield
5	DI-A	Data In circuit A
6	VC	Voltage Common
7	CO-A	Control Out circuit A
8	CO-S	Control Out circuit Shield
9	CI-B	Control In circuit B
10	DO-B	Data Out circuit B
11	DO-S	Data Out circuit Shield
12	DI-B	Data In circuit B
13	VP	Voltage Plus
14	VS	Voltage Shield
15	СО-В	Control Out circuit B
SHELL	PG	Protection Ground (Conductive Shell)

MII — 100Base-T



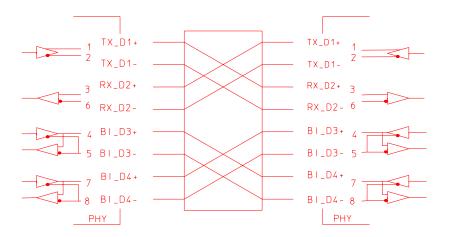
Pin	Circuit Name	Pin	Circuit Name
1	+5 V	21	+5 V
2	MDIO	22	COMMON
3	MDC	23	COMMON
4	RXD<3>	24	COMMON
5	RXD<2>	25	COMMON
6	RXD<1>	26	COMMON
7	RXD<0>	27	COMMON
8	RX_DV	28	COMMON
9	RX_CLK	29	COMMON
10	RX_ER	30	COMMON
11	TX_ER	31	COMMON
12	TX_CLK	32	COMMON
13	TX_EN	33	COMMON
14	TXD<0>	34	COMMON
15	TXD<1>	35	COMMON
16	TXD<2>	36	COMMON
17	TXD<3>	37	COMMON
18	COL	38	COMMON
19	CRS	39	COMMON
20	+5 V	40	+5 V

MDI — 100Base-TX



Pin	Circuit Name
1	TX_D1+
2	TX_D1-
3	RX_D2+
4	BI_D3+
5	BI_D3-
6	RX_D2-
7	BI_D4+
8	BI_D4-

Crossover Function





Declarations of Conformity

J1990A Full Duplex Ethernet Tap

DECLARATION OF CONFORMITY CE Agilent Technologies According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014 Manufacturer's Name: Agilent Technologies, Inc. Manufacturer's Address: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America Declares that the product, Product Name: Full Duplex Ethernet Tap Model Number: J1990Å **Product Options:** This declaration covers all options of the above product. Conforms with the following product standards: FMC. The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union). Construction File) EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997 Against: As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001. Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety Canada: CSA C22.2 No. 1010.1:1992 Supplemental Information: 27 November 2001 Regulatory Manager For further information, please contact your local Agilent Technologies sales office, agent, or distributor. Revision: A.00.00 Issue Date: 27 NOV 2001 Document No. J1990A-DoC-A.00.00

J2294C CEPT-E1 DB9 & RJ-45 Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: CEPT-E1 DB9 & RJ-45 Balanced Module

Model Number: J2294C

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety /EC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2294C-DoC-A.00.00

J2294D, J2296D, J2298D E1 and T1 Interface Modules

DECLARATION OF CONFORMITY Agilent Technologies

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

CE

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the products,

Model Numbers:

Product Names: E1/T1 DB-9 / RJ-45, E1 BNC 75 ohms, and E1/T1 RJ-45/RJ-48C/mini-

bantam Interface Modules

J2294D, J2296D, and J2298D **Product Options:** This declaration covers all options of the above product.

Conform with the following product standards:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

(Technical Construction File)

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997 Against:

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Regulatory Manager

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J229xD-DoC-A.00.00

J2300D Advisor WAN

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014



Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor - WAN

Model Number: J2300D

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

EMC Test Center, York EMC Services Limited Appointed Competent Body Assessed by:

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2300D-DoC-A.00.00

J2300E Advisor WAN

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor - WAN

Model Number: J2300E

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Construction File)

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2300E-DoC-A.00.00

J2306B, J2309B LAN Ethernet and Eth/Token Ring Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY



According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - Ethernet and Ethernet/Token Ring undercradles

Model Number: J2306B and J2309B

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

(Technical Construction File)

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay
Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995*

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

21 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 21 FEB 2002

Document No. J230xB-DoC-A.00.00

J2307A LAN Token Ring Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Agilent Technologies, Inc. Manufacturer's Name:

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: LAN - Token Ring undercradle

Model Number: J2307A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

(Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2307A-DoC-A.00.00

J2524A FDDI Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - FDDI undercradle

Model Number: J2524A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Construction

File)

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002

Document No. J2524A-DoC-A.00.00

J2527A TIMS Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor - TIMS undercradle

Model Number: J2527A

Against:

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

(Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2527A-DoC-A.00.00

J2900A High Speed Acquisition Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor - High Speed Acquisition undercradle

Model Number: J2900A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union). Construction

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety /EC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

File)

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

J2901A Gigabit Ethernet Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the products,

Product Name: Agilent Advisor LAN - Gigabit Ethernet undercradle

Model Number: J2901A

Against:

Product Options: This declaration covers all options of the above products.

Conform with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Laser/LED /EC 60825-1:1993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2901A-DoC-A.00.00

J2904B, J2293B/94B/96B/97B/98B/99B ISDN/BERT Interface Modules

Agilent Te	chnologies A	DECLARATION OF CONFORMITY According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014
Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Address	: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America
Declares that	the produc	cts,
Product Nam Model Numi Product Op	CE RJ- bers: J29	DN BRI S/T Simulation/BERT, CEPT-E1 DB9 75-ohm unbalanced, PT-E1 DB9 120-ohm balanced, CEPT-E1 BNC, CEPT-E1 BR-2, T1 48C/mini-bantam, and T1 RI-4S/mini-bantam Interface Modules 904B, J2293B, J2294B, J2296B, J2297B, J2298B, and J2299B is declaration covers all options of the above product.
Conform with	the follow	ing product standards:
EMC The product here (Technical (including 93/68/8		herewith complies with the requirements of the EMC Directive 89/336/EEC 68/EEC) and carries the CE Marking accordingly (European Union).
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199
	As detailed in	n: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed by	: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristie Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		. 1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 SA C22.2 No. 1010.1:1992
Supplementa	l Informatio	on:
		Med f your
19 February 20 Date	02	Neil Yosinski Name
		Regulatory Manager Title

J2905B ISDN BRI S/T and U Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: /SDN BR/ S/T and U Interface Module

Model Number: J2905B

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (Furnean Union)

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building

Donibristle Industrial Park
Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2905B-DoC-A.00.00

J2908A DDS 4-Wire Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor - DDS 4-wire Module

Model Number: J2908A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction File) The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC
Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2908A-DoC-A.00.00

J2909A ATM DS-3/E3 Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor ATM - DS-3/E3 Module

Model Number: J2909A

Against:

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2909A-DoC-A.00.00

J2912A ATM OC-3c/STM-1 Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the products,

Product Name: Agilent Advisor ATM - OC-3c / STM-1 module

Model Number: J2912A

Product Options: This declaration covers all options of the above products.

Conform with the following product standards:

EMC 7/ (Technical (in Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 10801/1CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Laser/LED /EC 60825-1:1993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J2912A-DoC-A.00.00

J2912B ATM OC-3c/STM-1 Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 $C \in$

Agilent Technologies, Inc. Manufacturer's Name:

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the products,

Product Name: Agilent Advisor ATM - OC-3c / STM-1 module

Model Number: J2912B

Product Options: This declaration covers all options of the above products.

Conform with the following product standards:

(Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building

Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Laser/LED IEC 60825-1:1993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Regulatory Manager

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2912B-DoC-A.00.00

J2913A ATM 155-UTP Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor ATM - 155-UTP Module

Model Number: J2913A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

(Technical (including 93/68/EEC) and carries the Construction File) Against: EMC test specification

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay
Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995*

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2913A-DoC-A.00.00

J2913B ATM 155-UTP Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 $C \in$

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor ATM - 155-UTP Module

Model Number: J2913B

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

EMC Test Center, York EMC Services Limited Appointed Competent Body Assessed by:

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2913B-DoC-A.00.00

J2914A STM-1e Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor STM-1e/EC-3 Module

Model Number: J2914A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union). Construction

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

File)

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J2914A-DoC-A.00.00

J3444A Fast Ethernet LAN Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - Fast Ethernet undercradle

Model Number: J3444A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

EMC Test Center, York EMC Services Limited Appointed Competent Body Assessed by:

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J3444A-DoC-A.00.00

J3445A 100Base-FX Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - 100Base-FX interface module

Model Number: J3445A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Irechnical (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Construction File)

Safety

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J3445A-DoC-A.00.00

J3446D Advisor LAN

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 $C \in$

Agilent Technologies, Inc. Manufacturer's Name:

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - 10/100 Ethernet

Model Number: J3446D

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

(Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J3446D-DoC-A.00.00

J3446E Advisor LAN

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - 10/100 Ethernet

Model Number: J3446E

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom

Safety IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

J3447A LAN 100BaseFX Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 $C \in$

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor LAN - 100Base FX Interface module

Model Number: J3447A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction File) The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay
Dunfermine, Fife KY11 9HZ United Kingdom

Safety /EC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

J3759A DS-3/E3 Cells & Frames Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor WAN - DS-3/E3 Cells & Frames module

Model Number: J3759A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

(lecnnical (including 93/bb/EEC) and carries the CE Marking accordingly (European Union).

Construction
File) Against: EMC lest specifications EN 55011:1991 (Group 1, Class A) and

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/T/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002

Document No. J3759A-DoC-A.00.00

J3759B DS-3/E3 Cells & Frames Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

CE

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor WAN - DS-3/E3 Cells & Frames module

Model Number: J3759B

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

(Technical (including 93/68/EEC) and carries the CE Marking accordingly (European United Construction
File) Against: EMC test specifications EN 55011:1991 (Group 1, Class A) &

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080//CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J3759B-DoC-A.00.00

J3762A HSSI Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor WAN - HSSI module

Model Number: J3762A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union). Construction

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 18801/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference 4-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building
Donibristle Industrial Park
Dalgety Bay
Dunfermine, Fife KY11 9HZ United Kinadom

Duniernine, The KTTT 3112 Officed Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

File)

Safety

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 | Issue Date: 19 FEB 2002 | Document No. J3762A-DoC-A.00.00

J3762B HSSI Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor WAN - HSSI module

Model Number: J3762B

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Construction
File)

Against:

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1980/1/CBR. based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2389-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety *IEC* 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinsk

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J3762B-DoC-A.00.00

J3763A, J3764A ATM 622 Undercradle and OC-12/STM-4c Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014



Manufacturer's Name:

Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919

United States of America

Declares that the products,

Product Name: ATM 622 undercradle and OC-12c/STM-4c single-mode optical module

Model Number: J3763A and J3764A

Product Options: This declaration covers all options of the above products.

Conform with the following product standards:

(Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No.

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park

Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Safety

Canada: CSA C22.2 No. 1010.1:1992

Laser/LED IEC 60825-1:1993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1

Supplemental Information:

16 October 2001

Regulatory Manager Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor. Revision: A.00.00 Issue Date: 16 OCT 2001 Document No. J3763A-DoC-A.00.00

J3766A ATM25 Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Agilent Advisor WAN - ATM25 module

Model Number: J3766A

Against:

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC (Technical Construction

File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC

(including 93/68/EEC) and carries the CE Marking accordingly (European Union).

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC

1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay

Dunfermine, Fife KY11 9HZ United Kingdom

Safety /EC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J3766A-DoC-A.00.00

J4630A VQT Undercradle

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: Analog FXO / E&M - VQT undercradle

Model Number: J4630A

Product Options: This declaration covers all options of the above product.

Conforms with the following product standards:

EMC The product herewith complies with the requirements of the EMC Directive 89/336/EEC (Technical (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1880/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference 4-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body

Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom

Duntermine, Fite KY11 9HZ United Kingdom

Safety IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Date

File)

Neil Yosinski

Name

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J4630A-DoC-A.00.00

J4646A/47A and J4648A/49A E1 and T1 ISDN PRI Interface Modules

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

CE

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America

Declares that the products,

Product Names: E1 ISDN PRI modules (Unbalanced BNC / Balanced DB9/RJ45) and

T1 ISDN PRI modules (Bal. Bantam/RJ48C / Bal. Bantam/RJ45C)

Model Numbers: J4646A/J4647A and J4648A/J4649A

Product Options: This declaration covers all options of the above product.

Conform with the following product standards:

EMC (Technical Construction File)

The product herewith complies with the requirements of the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly (European Union).

Against: EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997

As detailed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.

Assessed by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building

Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

19 February 2002

Safety

Regulatory Manager

Title

For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00

Issue Date: 19 FEB 2002

Document No. J464xA-DoC-A.00.00

J5457A High-Speed V-Series Interface Module

Agilent Technologies

DECLARATION OF CONFORMITY

According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014

 ϵ

Manufacturer's Name: Agilent Technologies, Inc.

Manufacturer's Address: Network Systems Test Division (NSTD)

5070 Centennial Boulevard

Colorado Springs, Colorado 80919 United States of America

Declares that the product,

Product Name: High-Speed V-Series interface module

Model Number: J5457A

Product Options: This declaration covers all options of the above product.

Conforms with the following European Directives:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC (including 93/68/EEC) and carries the CE Marking accordingly.

Conforms with the following product standards:

EMC Standard

Limit

IEC 61326-1:1997+A1:1998 / EN 61326-1:1997+A1:1998 Group 1 Class A [1]

CISPR 16-2:1996

 IEC 61000-4-4:1995 / EN 61000-4-4:1995
 0.5kV signal lines, 1kV power lines

 IEC 61000-4-5:1995 / EN 61000-4-5:1995
 0.5 kV line-line, 1 kV line-ground

 IEC 61000-4-1:1996 / EN 61000-4-6:1996
 3V, 0.15-80 MHz

 IEC 61000-4-11:1994 / EN 61000-4-11:1994
 1 cycle, 100%

Canada: ICES-001:1998

Australia/New Zealand: AS/NZS 2064.1

IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995

Canada: CSA C22.2 No. 1010.1:1992

Supplemental Information:

[1] The product was tested in a typical configuration with Agilent Technologies test systems.

1

19 February 2002

Safety

Date

Neil Yosinski

Name

Regulatory Manager

Title

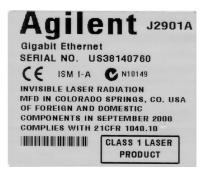
For further information, please contact your local Agilent Technologies sales office, agent, or distributor.

Revision: A.00.00 Issue Date: 19 FEB 2002 Document No. J5457A-DoC-A.00.01

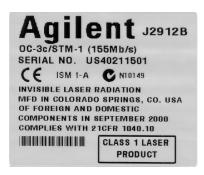
Laser Safety Statements

Some Advisor interfaces contain Class 1 laser devices. Class 1 laser devices are considered to be safe based upon current medical knowledge.

A laser safety warning label is attached to the individual interface where necessary. Examples of Class 1 warning labels are:









Safety Information for Laser Source Modules

Class 1 Laser Product: J2901A

Parameter	Specification		
Laser Type	Vertical Cavity Surface Emitting laser (VCSEL)		
Laser Class -			
21CFR 1040.10 (Canada, Japan, USA)	Class 1		
IEC825 (Europe)	Class 1		
Transmitter	Min.	Typical	Max.
Avg. Optical Power (dBm)	-10.0	-7.5	-4.0
Optical Wavelength (nm)	830	845	860
Receiver	Min.	Typical	Max.
Optical Sensitivity (dBm)	•	-19.0	-17.0
Peak Input Power (dBm)	•	•	0
Optical Wavelength (nm)	770	•	860



You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

Class 1 Laser Products: J2912A, J2912B

Parameter		Specificati	on
Laser Type	FP-Laser InGaAsP		
Laser Class -			
21CFR 1040.10 (Canada, Japan, USA)	Class 1		
IEC825 (Europe)	Class 1		
Transmitter	Min.	Typical	Max
Avg. Optical Power (dBm)	-12.0	-10.0	-5.0
Optical Wavelength (nm)	1260	1310	1360
		·	
Receiver	Min.	Typical	Max
Optical Sensitivity (dBm)	-28.0	-32.0	•
Peak Input Power (dBm)	•	•	-3.0
Optical Wavelength (nm)	1240	•	1650

WARNING

You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

Class 1 Laser Product: J3764A

(Interface Module for J3763A)

Parameter	Specification		
Laser Type	Fabry-P	Fabry-Perot Laser	
Laser Class -			
21CFR 1040.10 (Canada, Japan, USA)	Class 1		
IEC825-1 (Europe)	Class 1		
Transmitter	Min.	Typical	Max.
Avg. Optical Power (dBm)	-15	-13	-8
Optical Wavelength (nm)	1293	1310	1334
Receiver	Min.	Typical	Max.
Optical Sensitivity (dBm)	-28	-30	•
Peak Input Power (dBm)	•	•	-3
Optical Wavelength (nm)	1200	•	1550



You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

C Regulatory Information

Numerics	D	DSR control signals, 62
100Base-TX/10Base-T Ethernet connector, 57	data transmitter, internal, 63 date, 22	DTE switch, 63 DTR control signals, 62
A application key, 58 AUI, 56 B BIOS, 41 upgrading, 41 breakout box connections, 62	Declaration of Conformity J1990A, 76 J2293B/94B/96B/97B/98B/99B, 87 J2294C, 77 J2294D/96D/98D, 78 J2300D, 79 J2300E, 80 J2306B/J2309B, 81 J2307A, 82 J2524A, 83 J2527A, 84 J2900A, 85	E EIA-232D (Formerly RS-232C) specifications, 63 empty Undercradle, 35 endcap expander, 32 external monitor, 54 port, 64 F
RS232/V.24, 62 switches, 62 Button Mouse, 58	J2901A, 86 J2904B, 87 J2905B, 88 J2908A, 89 J2909A, 90 J2912A, 91	flat endcap, 32 frame ground, 63 functions V-Series interfaces, 66
cable power, 63 CD control signals, 62 circuits RS-232/V.24 circuits jumpering, 62 connections	J2912B, 92 J2913A, 93 J2913B, 94 J2914A, 95 J3444A, 96 J3445A, 97 J3446D, 98	grounding, 63 ground-loop problems, 63 power cable, 63 protective ground, 63 Grounding Strips, 32
breakout box, 62 RS-232 test connector, 62 RS-232/V.24 test connectors, 62 connector board, 32 connector card, 34 connector pinouts RS-232/V.24, 67 RS-449, 68 V.35, 69 country selection, 50 CTS control signals, 62	J3446E, 99 J3447A, 100 J3759A, 101 J3759B, 102 J3762A, 103 J3762B, 104 J3763A/J3764A, 105 J3766A, 106 J4630A, 107 J4646A/47A/48A/49A, 108 J5457A, 109 display connecting an external, 24	I I/O address space, 49 impedance, source, 63 Indicators Mark/Space Indicator, 63 Interface Module Install, 28 Remove, 29 Interfaces Pin-out comparison

RS-232C/CCITT V.24, 70	K	Р
RS-449, 70 internal data transmitter, 63 interrupts, 48	keyboard, 58 keypad, 60 LED, 60	PC Card, 44 compatibility, 44 configurations, 45
	keypad, 60	compatibility, 44
source, 64 jumpering capabilities, RS-232/V.24 circuits, 62	operating containors, 33	setting time and date, 22 signal ground, 63

signals CD control signals, 62	V
CTS control signals, 62 DSR control signals, 62	V.35 connector pinouts, 69
DTR control signals, 62 RTS control signals, 62	port, 64 vertical switch bank, 62
terminal generated control signals, 62 V-Series	V-Series functions, 66 interfaces
signal receivers, 63	RS-232, 66 RS-449, 66
impedance, 63 jacks, 64	V.35, 66
voltage, 64 Space LEDs, 63	signal receivers, 63
speakers, 14 Specifications FIA 222D (Formark) DS 222C) (2	Windows 00
EIA-232D (Formerly RS-232C), 63 supported configurations, 16 switches	Windows 98 keys, 58
switches breakout box switches, 62 DTE switch, 63	
lateral switch bank, 62 vertical switch bank, 62	
System LEDs, 62	
T	
terminal generated control signals, 62 tests	
RS-232 test connector, 62 RS-232/V.24	
test connectors, 62 time, 22	
Torx wrench, 32 transmitters	
internal data transmitter, 63	
U	
undercradle assembly, 37 attaching, 33 connector board, 34 disassembly, 35 empty, 35 install PC Cards, 36 J2295A, 35 metal plate, 33 remove, 34	