Agilent 34972A
LXI Data Acquisition Unit

Easily connect, configure and acquire data on the bench, on the network or in the field

Takes our best selling 34970A to the next level with:

✓ LAN & USB IO to PC

✓ USB flash drive support

✓ Graphical Web Interface

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Agilent 34972A LXI Data Acquisition Unit

Now with LAN & USB

Now with LAN and USB to easily connect, configure and acquire data on the bench, on the network or in the field

Now has Web Interface

- 3-slot LXI mainframe with 6 ½ digit DMM

- Measures temperature (RTDs, thermocouples, thermistors), AC/DC V and I, 2/4 wire resistance, frequency/period

- 1Gbit LAN and USB 2.0 standard on all units

- USB flash drive support for data storage or transfer

- Web Interface for easy set up and control

- Accepts all 34970A switch and control plug-in modules

- Free BenchLink data logger software to create tests without programming

34970A will continue to be available for GPIB and RS-232 applications

Free BenchLink data logger software

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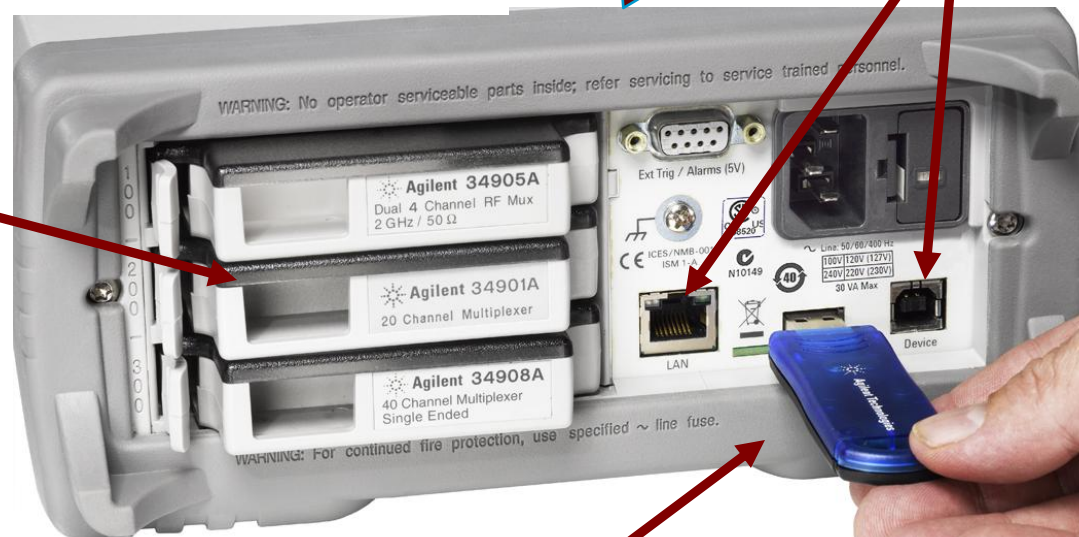
Agilent 34972A – A Closer Look

- **Easy to use front panel control**
- **Optional internally mounted 6 ½ digit DMM**

NEW

Gigabit LAN and USB 2.0 for instant connection to a PC

Choose from 8 plug-in modules with on-board screw terminals

NEW

USB flash drive for standalone applications:
- **Copy BenchLink data logger files to instrument**
- **Log measurements directly to USB stick**
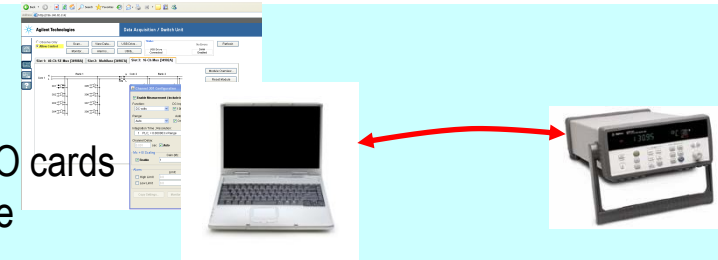- **Copy internal memory data to USB stick**

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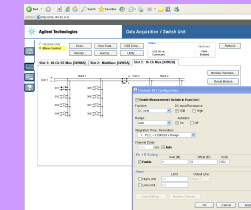# 34972A on the Bench, on the Network or in the Field

In Design Validation
– Instant LAN or USB connection to the PC – no need to purchase IO cards
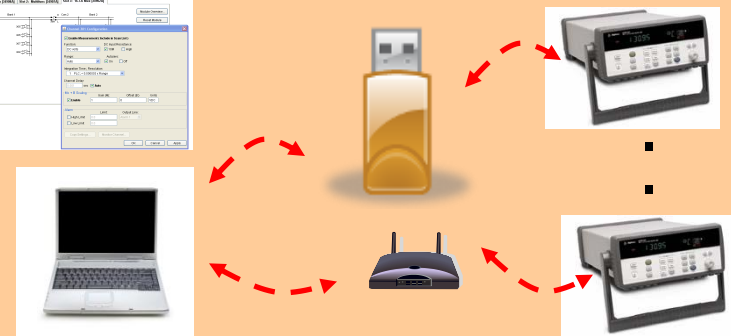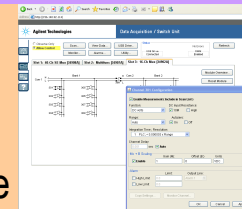– Easy set up and control with BenchLink or Graphical Web Interface

In Functional Test
– Connect to the company network
– Troubleshoot test development through Graphical Web Interface
– Remote monitoring through Graphical Web Interface

When Logging Data
– Remote network connection through LAN (wireless or wired)
– Remote monitoring & control with BenchLink or Web Interface
– No PC required – use USB flash to upload configuration or transfer data back to the PC for analysis

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34972A Graphical Web Interface

Remote access and control of the 34972A via a standard Web Browser from anywhere on the Network

Set up, troubleshoot and debug

Check configurations

Open/close/monitor

Define & execute scan lists
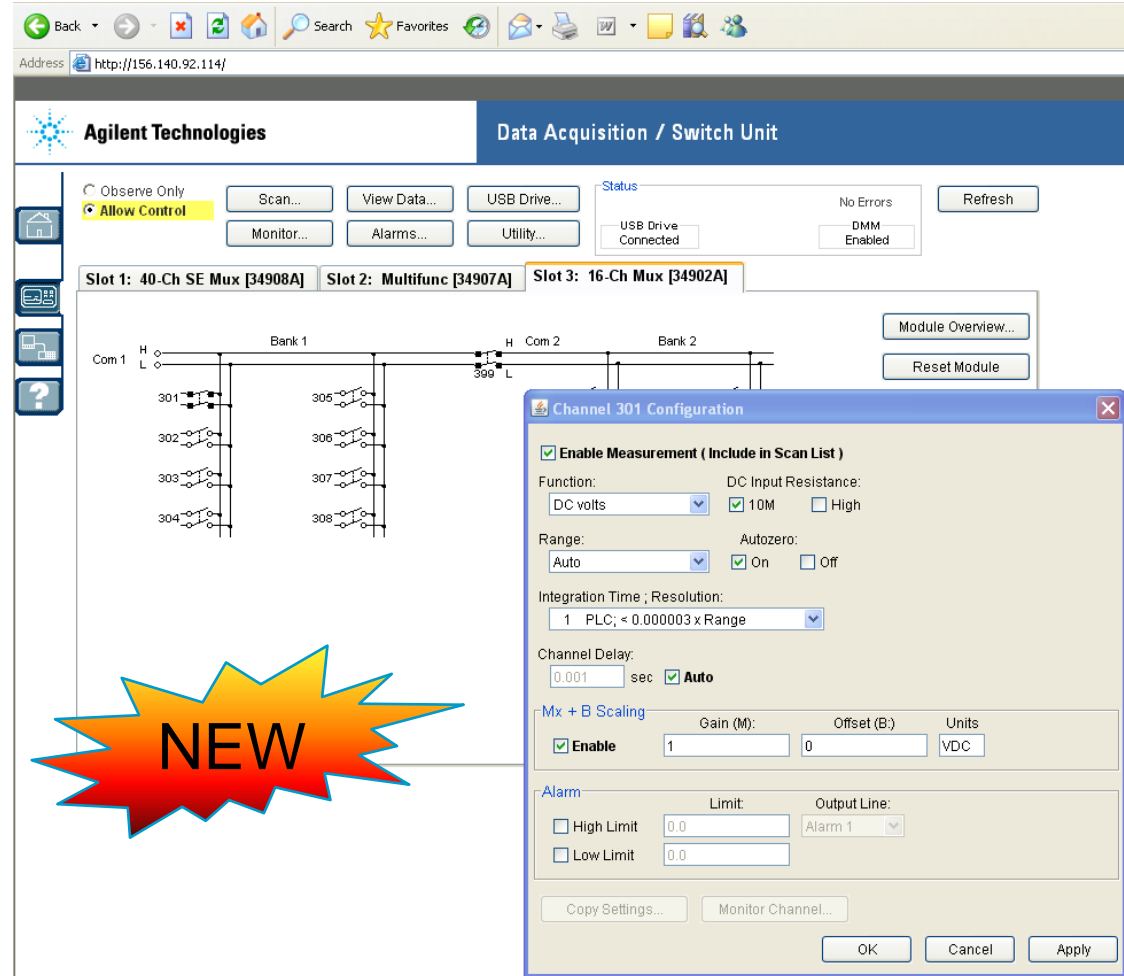
Send, receive and view SCPI commands

OS independent

Password protection/ LAN lockout

Status and maintenance

Error queue, I/O traffic

Status report - cal status, relay counter

NEW

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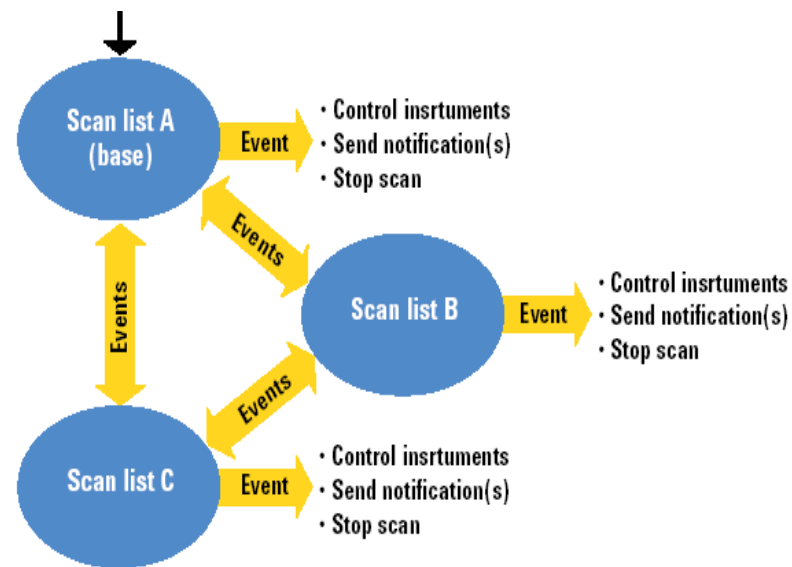# BenchLink Data Logger Software for 34970A & 34972A

FREE

BenchLink Data Logger for the 34970A and 34972A provides high-speed data logging software with quick and easy access to measurements

BenchLink Data Logger Pro: $795

Advanced data logging and decision making without programming

• Quickly set up and execute tests with real-time limit checking, decision making and conditional branching

• Create multiple scan lists

• Execute events based on predefined limits

• Use advanced math functions

• Present data on a single or multiple graphs

• Export data to other applications for presentation and analysis

Product video and software download at:
www.agilent.com/find/34832A

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34970A and 34972A Standard Features

Mainframe

- 3 slots-up to 120 single -ended channels or 96 matrix cross points in one frame

- Scans up to 250 ch/sec

- 50 Kreadings of non-volatile memory, auto timestamp

- Per Channel Function, Scaling, & Alarming

- Power-fail Recovery

- Relay count for system maintenance

- Real-time clock battery backed with 1ms resolution

- Non-volatile storage for 5 complete configurations

- Software drivers for VEE, LabVIEW, C, C#, Basic, .net

Internal DMM

- 6.5 digits (22 bits) of resolution with 0.004% 1 year DCV accuracy

- Isolated to 300 V

- Measures
  - 2- and 4- wire Ohms
  - DC and AC volts
  - Temperature: 8 thermocouples types, RTDs, thermistors
  - Frequency, Period to 300 kHz
  - DCI, ACI (channels 21 and 22 on 34901A module only)

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34972A Mainframe and Modules Ordering Information

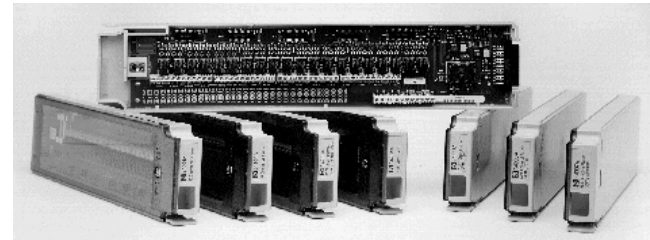**34972A-DMM Data Acquisition Unit w/ DMM, $1,845**

Includes Operating and Service Manuals on CD-ROM,
  Test Report, power cord, and Benchlink Data Logger 3

Options:

- **34972A-001 Mainframe w/out DMM**
- **34972A-ABA English printed manual**
- **34972A-A6J ANSI Z540 compliant calibration**
- **34972A-1CM Rack mount kit**
- **34830A BenchLink Data Logger Pro**

Modules

- **34901A 20 ch general purpose mux, $481**
- **34902A 16 ch high-speed mux, $585**
- **34903A 20 ch GP switch (formC), $414**
- **34904A 4 x 8 matrix card, $519**
- **34905A 50 ohm RF mux, $758**
- **34906A 75 ohm RF mux, $758**
- **34907A multifunction module, $388**
- **34908A 40 ch single-ended mux, $495**

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34970A and 34972A – How are they different?

34972A is easily integrated into existing 34970A applications

– **Same measurements**

– **Same modules & wiring**

– **Same SCPI commands – just make a simple address change (example):**

Change: *Set inst1.IO = ioMgr.Open("GPIB0::9::INSTR")*

To: *Set inst1.IO = ioMgr.Open("TCPIP0::156.140.77.230::inst0::INSTR")*

	34970A	34972A
Support 8 plug-in modules	✔	✔
BenchLink Data Logger/PRO software	✔	✔
IVI-C, IVI-COM, LabView drivers	✔	✔
Gaphical Web interface		✔
Gigabit LAN		✔
USB 2.0		✔
USB flash drive support		✔
GPIB	✔	
RS-232	✔	

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Limited Time Price Promotion

For a limited time purchase the 34972A at the 34970A price

Now get a LAN/USB data acquisition unit to connect directly to your PC at a lower price - *No need to purchase expensive IO cards or converters*

Promo code: 5.784

Effective until July 31, 2010

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New Agilent switch selection tools:
See www.agilent.com/find/dataacquisition

• View all Agilent Data Acquisition and Switch Platforms

• Side-by-side comparisons of different mainframe and module functionality and price

• Use the switch configurator to configure a complete solution with mainframe, cards and options

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Agilent 34972A LXI Data Acq

Learn More

Sign up to receive new application briefs or product promos
www.agilent.com/find/34972ASpotLight

Over 15 Application notes/briefs with subjects like

- *Increase Data Acquisition flexibility with wireless LAN*

- *Selecting the Right Data Acquisition System (AN 1412)*

- *Making High Accuracy Temperature Measurements (AN 1425)*

- *Practical Temperature Measurements*

- *Practical hints for making fast scans of multiple-sensor systems*

- *Maximizing the Life Span of Your Relays (AN 1399)*

- *Improve your data logging productivity in advanced limit testing*

- *Characterizing I-V Curve for Solar Cells and Modules (AN 4050)*

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Agilent Data Acquisition and Switching Instruments

34970/72A data acquisition & switch units

- Data logger, DAQ system or low-cost switching unit
- **Three-slot mainframe**
- **Maximum 60 channels**
- **8 plug-in modules**
- Built-in 6½-digit DMM (optional)
- BenchLink data logger software

34972A Adds:

- **LAN and USB interfaces**
- **Graphical Web-browser Interface**
- **USB Flash Drive Support**

34980A multifunction switch/measure unit

- Optimized for design verification & manufacturing
- **Eight-slot mainframe**
- **Maximum 560 channels**
- **21 plug-in modules**
- **RF/uW Switching**
- Built-in 6½-digit DMM (optional)
- **GPIB, LAN & USB I/O**
- BenchLink data logger software
- **Graphical Web-browser interface**

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