

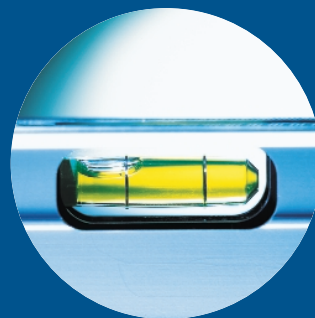


## Agilent Handhelds

**N3970A Optical Power Meter**

**N3974A Dual Laser Source**

**N3977A Automated Optical Attenuator**



- Extensive Functionality
- Robust Construction
- Ergonomic Design

**Tools for Technicians  
in the Palm of your Hand**



**Agilent Technologies**

## Built-in Usability

Naturally, Agilent's new high-performance precision handhelds meet the specifications required to install, commission or maintain optical fiber networks. But, more importantly, they offer features that make a difference in how efficiently and effectively you take the necessary measurements:

- Easy access to frequent functions, and a concealed keypad for more demanding applications.
- Storing results for detailed, off-line examination.
- Remote control for the optimal deployment of personnel.
- Pre-programming different set ups.
- Long battery life to minimize the disturbance to field trips.

## Tuned-in Operation

For continuity or loss testing, or for fiber identification, the N3970A Power Meter and the N3974A Dual Laser Source use a common Autotest capability to work together and ease your measurement procedures. Of course, both devices work independently too, for use in existing test setups or for transmitter testing.



### N3970A Optical Power Meter

The N3970A Optical Power Meter is simple to use and has a fast response time with no warm up period. Automatic wavelength identification is possible when used with an Autotest compatible light source, letting you measure at both 1310nm and 1550nm with a single push of a button. The power meter also features an audible signal for fiber identification, and an RS232 port for connection to a PC or laptop for remote control, data logging or merging, and reporting and printing using the Loss Test Companion Software.

<b>Wavelength</b>	850 nm to 1650 nm InGaAs detector
<b>Dynamic Range</b>	+5 dBm to -70 dBm
<b>Uncertainty<sup>1</sup></b>	±3 %
<b>Adapters Supplied</b>	FC, SC, ST (dust and drop protected)
<b>Memory</b>	845 locations
<b>Battery life</b>	Up to 240 hours

### N3974A Dual Laser Source

The N3974A Dual Laser Source guarantees ultra-high stability, even without a warm-up period. The dual wavelength source provides switched wavelength through a single connector.

The source also works with the Loss Test Companion Software for automated and remote loss tests.

<b>Wavelength</b>	1310 nm and 1550 nm Fabry Perot Laser
<b>Output Power</b>	-5 dBm (typical)
<b>Adjustments</b>	6 dB in 0.01 dB steps
<b>Stability</b>	±0.15 dB over 8 hrs
<b>Adapters Supplied</b>	FC, SC, ST (dust and drop protected)
<b>Battery life</b>	Up to 140 hours

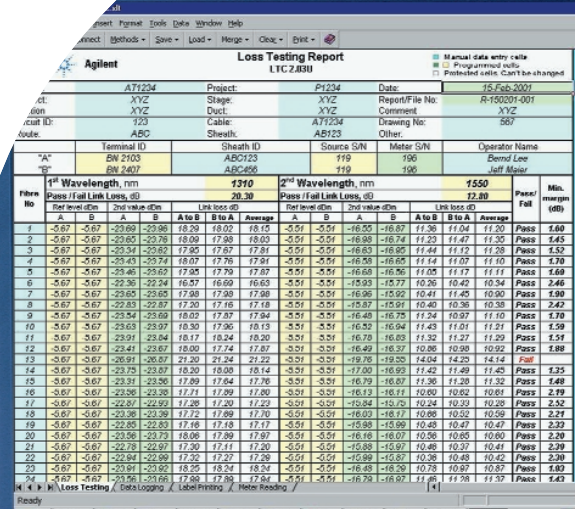




## Added-in Convenience

### The Loss Test Companion Software

The Loss Test Companion software is an easy-to-use Microsoft® Excel-based professional software tool, especially designed for fast two-way averaging and customized reporting.



The screenshot shows the 'Agilent Loss Testing Report' for project 'XYZ'. It includes fields for Project, Stage, Date, Report/File No., and various test parameters. Below these, there are tables for '1st Wavelength' and '2nd Wavelength' with columns for 'Pass / Fail Link Loss, dB' and 'Link loss, dB'. The report also includes a 'Pass / Fail' column and a 'Min. margin (dB)' column.

## Programmed-in Flexibility

### N3977A Automated Optical Attenuator

The N3977A Automated Optical Attenuator can be used in manual, relative, step and program mode. Program mode provides memory for 15 different pre-sets for easy recall or use by unskilled personnel. To ensure ultimate linearity and accuracy over the full dynamic range, the unit is calibrated at every attenuation position in 0.05 dB increments.

<b>Wavelength</b>	1200 nm to 1600 nm
<b>Attenuation Range</b>	2.5 to 60 dB
<b>Power Handling</b>	up to +23 dBm
<b>Repeatability</b>	Calibrated every ±0.03 dB
<b>Insertion Loss<sup>3</sup></b>	<2.5 dB
<b>Return Loss</b>	better than -40 dB
<b>Adapters Supplied</b>	FC, SC, ST (dust and drop protected)
<b>Memory</b>	15 programs
<b>Battery life</b>	200 to 600 hours

## Handy Accessories

A carry case is also available to fit any two of the instruments, though it is primarily intended for use with a power meter and a dual source to make up a portable loss test set. The N3979A AC/DC Adapter can be used with any of the instruments to preserve the battery-life<sup>3</sup>.



<sup>1</sup> At reference conditions.

<sup>2</sup> The AC/DC adapter is not available in: Australia, Korea, Japan and Mexico.

<sup>3</sup> At low position

# Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: „Our Promise“ and „Your Advantage.“

## Our Promise

Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including

realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

## Your Advantage

Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced

Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

## Related Agilent Literature

Agilent Handhelds  
N3970A Optical Power Meter,  
N3974A Dual Laser Source,  
N3977A Automated Optical Attenuator  
Technical Specifications  
P/N 5988-1067EN

Agilent E6000C Mini-OTDR  
and E6091A Toolkit II Plus  
Product Brochure  
P/N 5988-2238EN

Agilent E6020A Fiber Break Locator  
Product Brochure  
P/N 5988-2237EN

Cleaning Procedures for Lightwave  
Test and Measurement Equipment  
Pocket Guide  
P/N 5963-3538F

**By internet, phone, or fax, get assistance with all your test & measurement needs**

**Online assistance:**

**[www.agilent.com/find/assist](http://www.agilent.com/find/assist)**

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## Laser Safety Information

In the USA, all laser sources are specified by this data sheet are classified as Class I according to 21 CFR 1040.10 (1999). Internationally, the same laser sources are classified as Class 1 according to IEC 60825-1 (1998).

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