

ONA600 Optical Network Analyser



- Expandable Modular Design
- Rugged Portability
- O, C, S, and L Band Operation
- Chromatic Dispersion
- Polarization Mode Dispersion
- Spectral Attenuation

Overview

The ONA600 Optical Network Analyser is a powerful and versatile tool for characterisation of optical fibers and networks. The system consists of a mainframe, plug-in modules for measurement of Chromatic Dispersion, Polarization Mode Dispersion and Spectral Attenuation with a full range of optical light sources. Designed to deliver superior performance in a field environment, the advanced modular design reduces costs and ensures ultimate flexibility in next generation networks. An integrated touch-screen provides fingertip set-up and measurement with dedicated keys for all common operations. A variety of combinations of mainframe, modules and sources are available enabling the user to configure the system to match his unique requirement. A single module mainframe is ideally suited to customers who only need to characterise one fiber parameter.

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Mainframe

Two mainframe packages are available, the ONA601 and the ONA602.

The ONA601 single module mainframe is ideally suited for customers needing to characterise one fiber parameter .

The ONA602 two module mainframe is designed for customers wishing to measure any combination of PMD, CD and Spectral Attenuation.



The ONA601 and ONA602 offer an intuitive user interface with touch-screen display to allow the operator to read and interpret measurements quickly and simply. All mainframes include a fully functioning mains powered controller unit complete with Windows™ based operating system. An integral 20 GByte hard drive and 256 MByte portable flash memory disc drive are supplied as standard.

Modules

The CD610 delivers accurate chromatic dispersion measurements using the differential phase shift method for all types of fiber . The CD610 may be used for testing dispersion of compensated networks and for fine tuning the dispersion of completed links. Featuring a remote LED broadband light source (ONA610LS), optical fiber links can be measured with a single connection to the test fiber. The light source unit is available with single or dual LEDs allowing 1310, 1550 or 1620 nm windows to be continuously covered.

The PMD610 is a powerful tool for characterizing Polarization Mode Dispersion and has a dynamic range exceeding 60dB. The PMD610 delivers accurate PMD measurements using the interferometric method for all types of fiber. Featuring a remote LED broadband light source (ONA610LS), networks can be measured with a single connection to the test fiber. The light source unit is available with single or dual LED allowing 1310, 1550 or 1620 nm windows to be continuously covered.

The SA610 enables accurate measurement of Spectral Attenuation with high dynamic range. Measurements can cover all or part of the wavelength range from 1250 nm to 1640 nm depending on the choice of ONA610LS light source. Note that spectral attenuation can also be offered as an option integrated with the CD610 chromatic dispersion module.

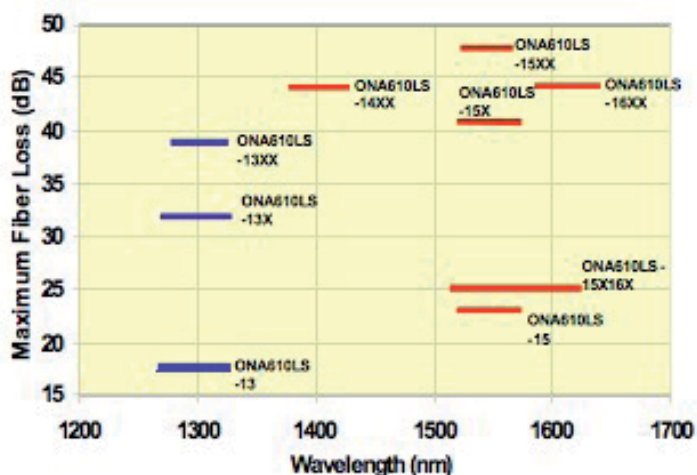
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Light Sources

Customers can specify a wide variety of light sources depending on their requirements for dynamic range and wavelength coverage (as shown in Fig 1). A single light source is suitable for any combination of chromatic dispersion, PMD or spectral attenuation measurements. Many customers choose to maximise efficiency by operating the ONA600 series mainframe and modules at a central hub in combination with two or more light sources at remote locations.



ONA610LS Light Source Options



General Specifications

Maximum Optical Input Power level	+6dBm
Operating Wavelength Range	1200-1660 nm, depending on ONA610LS light source
Operating Temperature Range	+5° to +40°C
Storage Temperature Range	-20° to +55°C
Weight	8.3 kgs (ONA601) 8.6 kgs (ONA602)
Dimensions:	40 x 32 x 14 cm (ONA601) 40 x 32 x 19.5 cm (ONA602)
Operating Voltage	90 - 240 V AC
Power consumption	Typically 40W
Processor	Pentium compatible, with 128MB RAM
Screen	640 x 480 TFT with CFL backlight and touchscreen
Hard disk capacity	20 GB
Interfaces	1 serial port DB9 pin (COM1)
(all PC compatible)	1 parallel port (lpt1), Dual USB, Ethernet (RJ45), VGA video monitor

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Technical Specifications

Please contact your local representative for detailed technical specifications on your desired configuration.

Ordering information

Customers should specify their choice of mainframes, one or more measurement modules and one or more light sources from the following:

ONA601	Single module mainframe
ONA602	Two module mainframe
CD610	Chromatic Dispersion Module
CD610SA	CD610 with Integrated Spectral Attenuation
PMD610	Polarization Mode Dispersion Module
SA610	Spectral Attenuation Module
ONA610LS/13X	High Power Broadband 1310 nm Source
ONA610LS/13XX	Extra High Power Broadband 1310 nm Source
ONA610LS/14XX	Extra High Power Broadband 1410 nm Source
ONA610LS/15X	High Power Broadband 1550 nm Source
ONA610LS/15XX	Extra High Power Broadband 1550 nm Source
ONA610LS16XX	Extra High Power Broadband 1600 nm Source

Options

In order to tailor the ONA600 series products to individual requirements, the following options are available.

- Mini Keyboard (PS2)
- Mouse (PS2 or USB)
- ONA620 Hard cover transit case
- VM610 connector inspection camera
- ONA602-BAT1 standard power battery for ONA602 mainframe
- ONA602-BAT2 extended power battery for ONA602 mainframe

PE.fiberoptics reserve the right to change or amend specifications without notice.

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