

# ONT-503

## Optical Network Tester



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### Key features

- 3 slots to cover multiple ports/applications
- Large 15" TFT touchscreen
- Interchangeable plug-in modules for most flexible use
- Linux operating system
- Easy test automation with full featured driver support

The ONT-503 is a 3-slot mainframe test solution with true multi-port operation for interactive and automated applications.

'Plug-in' modules allow for easy upgrade in the field and exchange of interfaces among ONT-503 mainframes as well as between ONT-506 and ONT-512 mainframes.

As part of the ONT-5xx family, the ONT-503 supports all modules available for the family and uses the same software concept as the ONT-506. Therefore, developed scripts can be used and training times for users are minimized.

### General specifications

#### Power supply (nominal range of use)

AC line voltage	100 to 240 V
AC line frequency	50/60 Hz, $\pm 5\%$
Power consumption (fully equipped)	max. 350 VA
Safety class to IEC 61010-1	class I

#### Ambient temperature

Nominal range of use	+5 to +40 °C/ 41 to 104 °F
Storage	-20 to +45 °C/ -4 to +113 °F
Transport	-40 to +70 °C/ -40 to 158 °F
Dimensions, including handle/bumpers (w × h × d)	360 × 392 × 185 mm, 14.1 × 15.4 × 7.3 in
Weight (without modules)	approx. 10 kg/ 21.5 lb

#### Clock and synchronization

Internal master clock accuracy	$\pm 2.0$ ppm (exceeds T1.101 stratum 3/3E accuracy)
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#### External synchronization

Connector, unbalanced	75 $\Omega$ , BNC jack
Clock source	DS1, E1, 1544 kHz, 2048 kHz, 1 MHz, 5 MHz, 10 MHz
Connector, balanced	110 $\Omega$ , Bantam jack
Clock source	DS1, E1, 1544 kHz, 2048 kHz

#### From RX

Each module may use its received signal clock information as reference for its transmitter.

#### Clock output

Connector, unbalanced	75 $\Omega$ , BNC jack
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### Instrument operation

The ONT-503, which uses the Linux operating system, supports three types of operation:

- Local GUI via built-in touchscreen
- Customer script controlled for test automation
- Remote operation via LAN

#### Touchscreen display

Large color TFT	15"
Resolution	1024 × 768 (XGA)

### Interfaces, storage, data transfer

The ONT-503 uses a Pentium PC as internal controller allowing to run Linux applications as well.

Interfaces	Ethernet (RJ45), USB, external keyboard, mouse, VGA, DVI
CD R/W/DVD-ROM drive for data transfer and software update.	
PC Pentium M, 1.8 GHz, 1 GB RAM	
Hard drive for data/setup storage	$\geq 40$ GB

### Remote control for test automation

The ONT-503 is controlled remotely via SCPI commands sent by the customer's program using an Ethernet TCP/IP connection.

Modules are addressed independently and in parallel and may be shared among multiple users.

Universal driver libraries facilitate automation with specific support for individual applications.

Scripting support via Tcl/Tk and C libraries and LabWindows drivers.

The interactive GUI also works in parallel to remote control, so that it is very easy to develop automated scripts.

## Related products

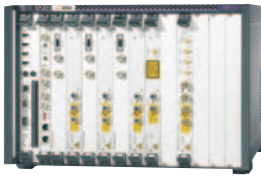
### ONT-506 Optical Network Tester

Desktop solution for testing of design and conformance of Next Generation transport networks. SDH, SONET, Multi-channel, OTN, Jitter, NewGen, Ethernet. Multiple users can run multiple applications simultaneously and independently. Linux operating system. High resolution 15" colored touchscreen, 6 slots.



### ONT-512 Optical Network Tester

Rack-mount solution for testing of design and conformance of Next Generation transport networks. Same applications as ONT-506. Easy integration into automated environments with Linux operating system and Tcl/Tk and LabWindows libraries. Built-in controller, 12 slots.



### Test Automation with the Multiple Application Platform (MAP)

With over 20 unique modules, MAP enables users to manipulate and control optical transmission signals (independent of rate or format) and enables testing of transmission quality as a function of parameters such as Average Power, OSNR and Polarization state. Optical switches and optical splitter modules may be added to enable automation interfaces for multiple devices and/or multiple signal sources.

The modular platform is available in 3 or 8 slot chassis with GPIB or RS-232 interfaces. ActiveX and LabView drivers are also provided. Rack mount kits and a reverse mount system enable clean factory test integration and rear fiber exit when needed.

2x2: Optical switch (cross)

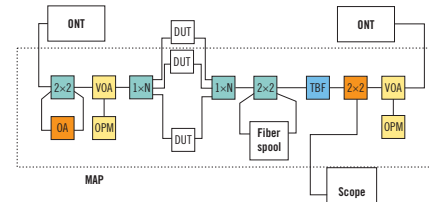
OA: Optical amplifier

OPM: Optical power meter

VOA: Variable optical attenuator

1xN: 1:N switch

TBF: Tunable band pass filter



### OLA-55M Optical Level Controller

The OLA-55M contains both attenuator and power level function making test set-up simple and eliminating the need to connect several instruments, cables and couplers.

See OLC-65 data sheet for details.



### OCK-10 Optical Cleaning Kit

To improve and assist fiber optic connection performance optical connectors need to remain clean. Fiber end surfaces need inspecting and cleaning prior to being placed in service.

The OCK-10 is a complete set of cleaning tools

