



FTTH Analyser



The quality, our benchmark

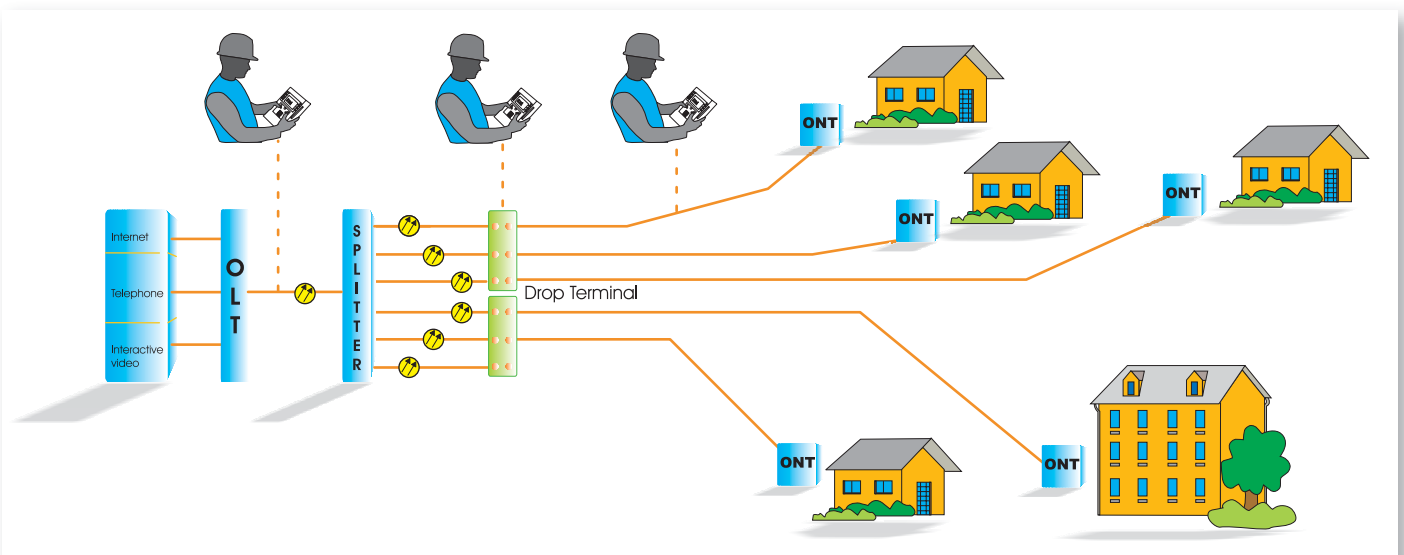
PROLITE-77



- FTTH Portable Analyser able to measure and display simultaneously three wavelengths (1310 and 1610 for Upstream and 1310, 1490 and 1550 nm for Downstream) in FTTH / PON systems and optimised for GPON architecture.
- Pass-through connection between the transmission centre (OLT) and the client (ONT), allowing full communication between them while performing the measurements.
- Troubleshooting by laser in the Visual Fault Locator mode.
- BURST measurement function for Upstream signal (1310 nm).
- HIGH / GOOD / BAD power level indicators based on thresholds values configured by the user.
- Data transfer to a computer via USB.
- Ideal for fieldwork: lightweight, resistant to adverse conditions and backlit.
- Simple and very intuitive Graphical Interface, easy to manage by ambidextrous arrows keys, softkeys and alphanumeric keypad.
- Connectors protected by sliding lids built in the instrument.
- Rechargeable Li-On Batteries.

The **PROLITE-77** is a tool designed for analysis, installation and maintenance of FTTH fibre optic systems, particularly FTTH-GPON systems. GPON are networks based on FTTH/PON technology, which provide speeds over 1 Gbps. The signal is distributed through a passive fibre optic network. The User's modem (ONT) transmits the in the form of bursts to the central (OLT). The GPON module has a function designed specifically to analyse the behaviour of these signals over time.

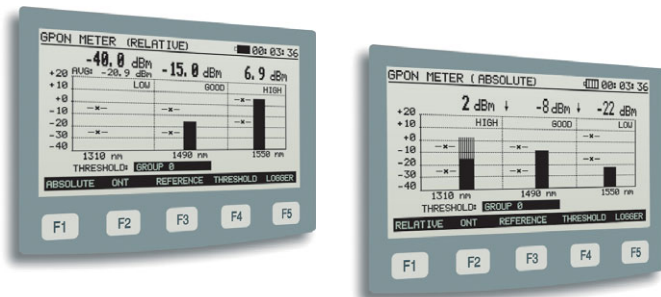
The **PROLITE-77** is simply and easy-to-use, accessing directly to the most important functions by a single keystroke. Just plugging one end (from the distribution centre) to the OLT input and other end (from the user) to the ONT input and pressing the corresponding key you will read the results on the display. The **PROLITE-77** acts as a pass-through device and is able to extract a small percentage of the transmitted signal for measurement, so the fibre optic service is not interrupted



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The **PROLITE-77** performs filtered and individualized measurements for the three wavelengths used in fibre (1490 nm, 1550 nm for Downstream and 1310 nm for Upstream) and it displays them simultaneously on screen. It allows the user to configure a maximum and minimum threshold value for each wavelength. Using a status message on the screen, the user can quickly know the status of the signal with respect to threshold values.

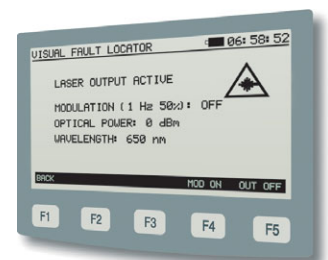
Threshold values can be grouped and saved in a computer memory. Onwards you can use the set of necessary threshold values. Another very interesting function is to take relative measures regarding a benchmark introduced previously and independently for each wavelength.



The **PROLITE-77** can store fifty measures in its internal memory. Using the **LOGGER** function you can store files with the measures at the date and time of acquisition. Then, you will be able to load the file and view the measures on the display or send them to a computer for evaluating and printing, via USB port.



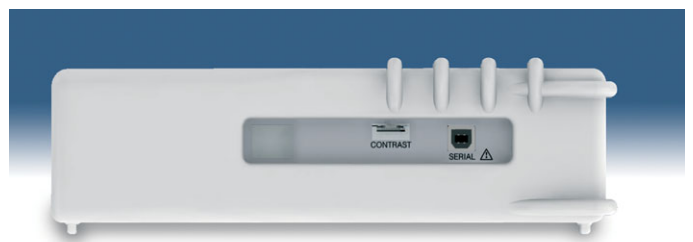
The **PROLITE-77** has a fault locator module for checking installations and troubleshooting. This optical output emits a visible laser light. You will be able to locate visually breaks or cuts, identify fibres, etc. just plugging the fibre to check into the laser output socket.



The **PROLITE-77** can be expanded with two more modules: an **OTDR** module and **Channel Analyser** module.

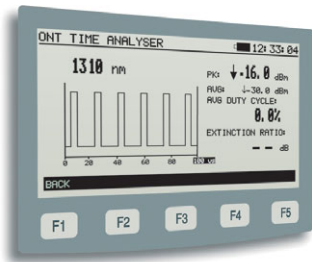
The **PROLITE-77** is designed for fieldwork, it is compact and resistant to adverse conditions. The backlit LCD display and the selectable contrast provides a good reading of results. The arrow and selection keys are for ambidextrous use and appropriate in size. It has a silicone protective cover perfectly adjusted, which is shockproof, protects it and facilitates holding it. Slider covers keep input and output connectors from dust and other external agents. They are integrated into the instrument itself.

The Li-Ion battery is rechargeable and provides long operating time.

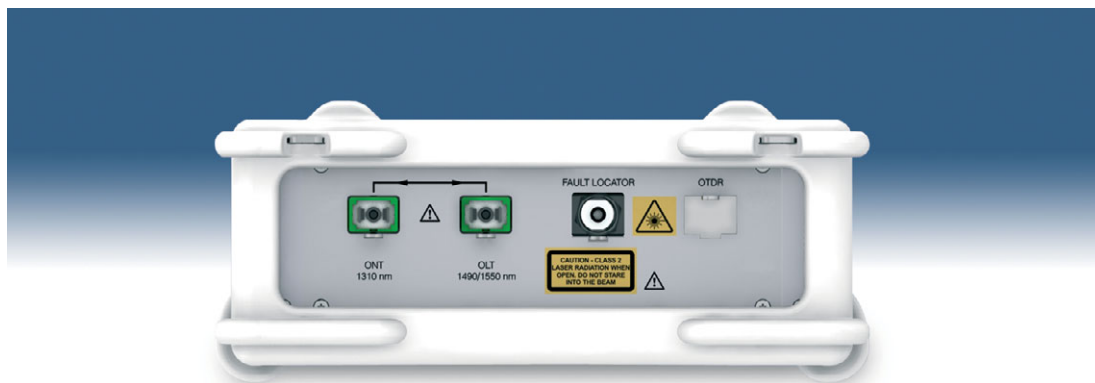
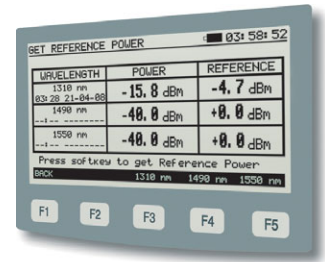


LOGGER REPORT: FTTH ANALYZER - SPON METER - PROLITE 75									
LOGGER 00, HUB BALMES 34 BCN 20:20:57 23 FEB 2009									
INPUT	PWR dBm	QLT	AVG dBm	REL PWR dB	Reference values	Thresholds	Group 00 user		
ONT 1310 nm	-13.5	GOOD	-20.6	-18.5	13.0 dB at 20:20:15 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1490 nm	-23.5	LOW		-28.5	13.0 dB at 20:20:25 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1550 nm	-40	NO SIGNAL		-40	13.0 dB at 20:20:35 2 feb 2009	-10.0 dBm to 20.0 dBm			
LOGGER 01, HUB BALMES 34 BCN 20:20:57 24 FEB 2009									
ONT 1310 nm	-13.5	GOOD	-20.6	-18.5	13.0 dB at 20:20:15 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1490 nm	-23.5	LOW		-28.5	13.0 dB at 20:20:25 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1550 nm	-40	NO SIGNAL		-40	13.0 dB at 20:20:35 2 feb 2009	-10.0 dBm to 20.0 dBm			
LOGGER 02, HUB BALMES 34 BCN 20:20:57 25 FEB 2009									
ONT 1310 nm	-13.5	GOOD	-20.6	-18.5	13.0 dB at 20:20:15 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1490 nm	-23.5	LOW		-28.5	13.0 dB at 20:20:25 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1550 nm	-40	NO SIGNAL		-40	13.0 dB at 20:20:35 2 feb 2009	-10.0 dBm to 20.0 dBm			
LOGGER 03, HUB BALMES 34 BCN 20:20:57 26 FEB 2009									
ONT 1310 nm	-13.5	GOOD	-20.6	-18.5	13.0 dB at 20:20:15 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1490 nm	-23.5	LOW		-28.5	13.0 dB at 20:20:25 2 feb 2009	-20.0 dBm to 5.0 dBm			
OLT 1550 nm	-40	NO SIGNAL		-40	13.0 dB at 20:20:35 2 feb 2009	-10.0 dBm to 20.0 dBm			

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In summary, the **PROLITE-77** is the ideal tool to analyse any optical fibre installation. It is hand-held, lightweight, easy-to-use, economical and has all the functions to perform a proper fibre optic installation and its maintenance.



SPECIFICATIONS	PROLITE-77	Fault locator	
Attenuation test Triple band selective input Measurement range Complementary LASER source	1310 nm, 1490 nm, 1550 nm From -50 dBm to 20 dBm PROLITE-105	LASER type Wavelength Optical Power Intensity Modulation Connector	FP 650 nm -2 dBm (Mono Mode) / Class 2 1 Hz / 50 % Universal Receptacle 2.5 mm
GPON/RFOG Measures Operating Wavelength Range Double band ONT input (Up.) OLT Input (Downstream) Insertion Loss (ONT-OLT) Polarization depending on loss Isolation 1330 nm ~ 1490/1550 nm 1490 nm ~ 1550 nm Optical Connectors ONT, OLT Internal Fibre optic Dynamic Range ONT Input OLT Input	1310 ±40 nm (GPON) 1625 ±50 nm (RFOG) 1490 ±10 nm and 1550 ±10 nm < 1.2 dB < 0.2 dB > 50 dB > 50 dB SC/APC SMF-28E From -30 dBm to 10 dBm From -50 dBm to 20 dBm	Power supply Battery Low Battery Indicator Battery Charging Mains Adapter AL-103	Li-Ion (7.4 V – 4,8 Ah) Graphic indicator on screen (four levels) By fast internal charger 100 a 240 V AC / 50-60 Hz / 12 V DC (European countries and others)
		Mechanical Features Dimensions Weight	W. 160 x H. 230 x D. 50 mm 1.4 kg
		Included Accessories AL-103 AA-103 FD-90 CA-005	Mains Adapter Car lighter charger Carrying bag Mains Cord Battery Instruction Manual

Design and specifications are subject to changes without prior notice 05-10.