PROMAX

PROLITE-77B

FTTH ANALYSER & SELECTIVE OPM

FTTH Analyser

Made in EU

The quality, our benchmark

www.promaxelectronics.com

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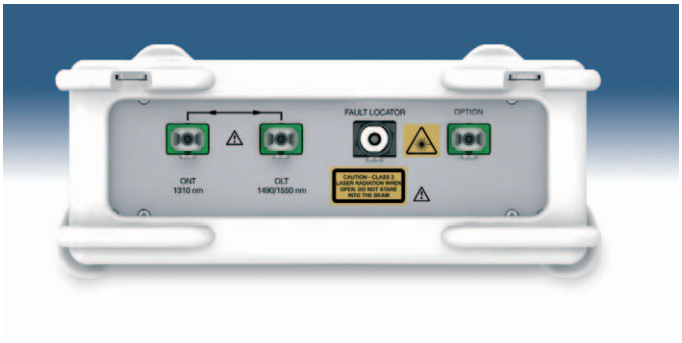
optional:

C band

Professional measurements

- FTTH portable analyser for FTTx/PON systems, optimised for GPON architecture.
- Filtered measurements, individualized and simultaneous for the three wavelengths that are used in fibres (1490 and 1550 nm for Downstream and 1310 nm for Upstream).
- Up to 10 groups of configurable threshold values: Maximum and minimum values per wavelength.
- High selectivity in measuring each wavelength.
- Relative measurement: Estimation of losses with respect to a configurable reference value.
- Expandable to channel analyser module in C-band.
- Attenuation test. Selective filters at three wavelengths.

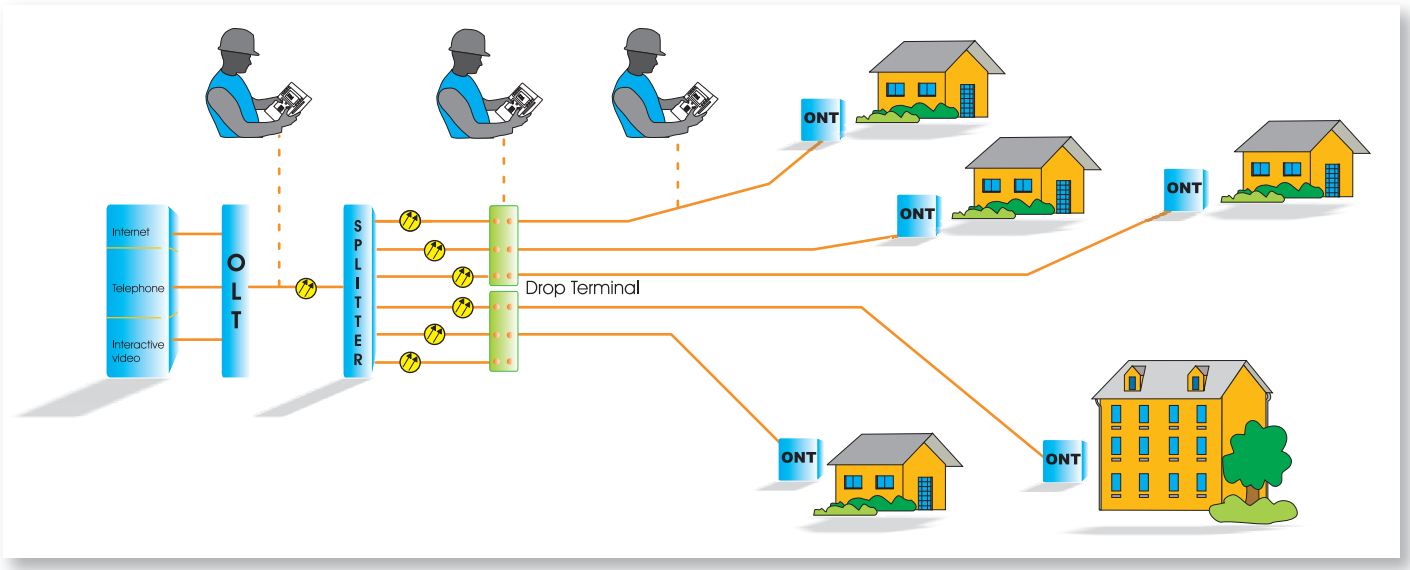


Fibre Optics networks

GPON are networks based on FTTX/PON technology, which provide speeds over 1 Gbps, using only passive elements.

GPON (Gigabit Passive Optical Network): This is the technology used in most applications in which the optical fibre is passed up to the user (**FTTH** Fibre To The Home).

The user has an **ONT** device (Optical Network Termination) that communicates with a device on the **OLT** (Optical Line Termination) network. This **OLT** transmits the Downstream signal permanently while responses of **OTN** users are pulsed.



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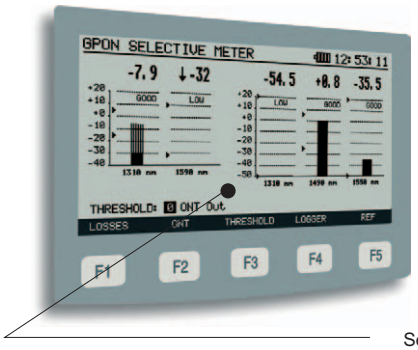
Very intuitive graphical environment: Fast display of measures on screen

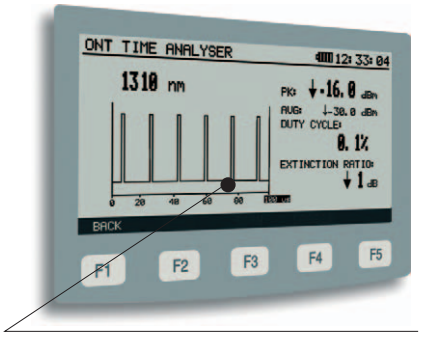
- Graphical (bars) and numerical representation of power.
- Shows simultaneously the 3 wavelengths in the screen.
- Status LEDs: GREEN (within threshold values), RED (below threshold values) and ORANGE (above threshold values).
- Simultaneous display of Upstream signal low and peak values.
- It allows the user to configure threshold values for each wavelength
- It displays messages indicating the power over the threshold value (LOW, OK, HIGH).



Selective GPON meter

Easy to use, Plug and Play!

- Just connect the fibre and read the results.
- Directionality at the measurement: It avoids confusion between OLT and ONT.
- Pass-through ONT and OLT connection, allowing full communication while performing the measurements.
- Ambidextrous keyboard. Charge indicator on screen.
- Keyboard shortcuts to the most important functions.



ONT time analyser

Upstream analysis in detail

- Graphical representation of the upstream signal over time.
- High resolution of pulses (up to 50 µs). Duty Cycle and Extinction Ratio measurement.

Attenuation Test: a quick way to certify the wiring

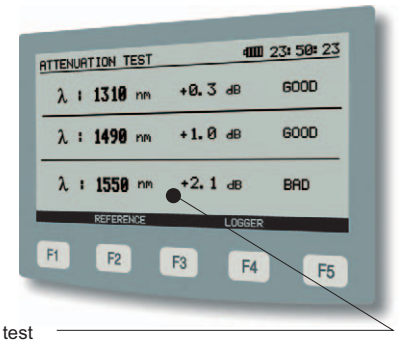
- Connect a pulse generator, such as the **PROLITE-105**, in the head-end and check the quality of reception for each wavelength at each network outlet with the **PROLITE-77B**.
- The **PROLITE-105** can generate sequentially three pilots independently, without intervention of an operator: just a single person to check the whole system!

Visual Fault Locator: It quickly detects any problem

- Visible laser of 650 nm for the visual fault location in interconnections. Beam emission in continuous or pulse mode.
- LED laser in operation warning indicator.
- UNIVERSAL output laser connector.

Ideal for fieldwork

- 13 cm screen (5 ") backlit and contrast adjustable.
- Silicone protective cover: protects the instrument and facilitates holding it.
- Integrated slider covers keep input and output connectors from dust.
- Rechargeable, long operating time Li-Ion battery.
- Carrying case with belt included.



Selective attenuation test

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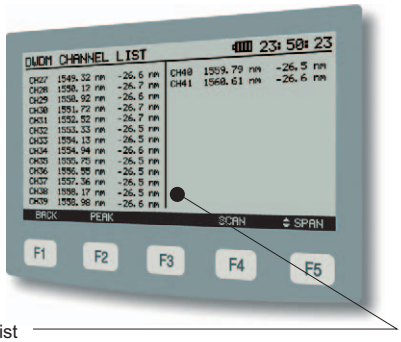
Data management: Keep measurement records of each installation

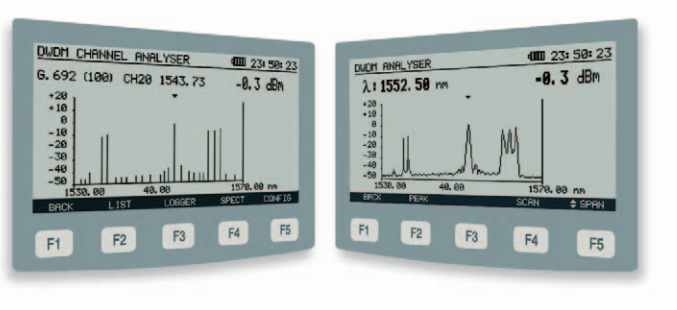
- It stores up to 100 records on the equipment memory.
- Each record comprises measures for 3 wavelengths: Date and time of acquisition, absolute measures, state regarding threshold, relatives measures.
- Data transfer to a computer via USB.
- Unique software for data management supplied with the equipment.



DWDM channel list

Spectrum analyser in C-band OP-077-S option

- Specially designed for ITU G692 channels separated by 100 GHz (0.8 nm) in C band (1529-1564 nm).



SPECIFICATIONS	PROLITE-77B
Attenuation test	
Triple band selective input	1310 nm, 1490 nm, 1550 nm
Measurement range	From -50 dBm to 20 dBm
Complementary LASER source	PROLITE-105
GPON/RFoG Measures	
Operating Wavelength Range	
Double band ONT input (*Up.*)	1310 ±40 nm (GPON) 1625 ±50 nm (RFoG)
OLT Input (*Downstream*)	1490 ±10 nm and 1550 ±10 nm
Insertion Loss (ONT-OLT)	< 1.2 dB
Polarization depending on loss	< 0.2 dB
Isolation	
1330 nm ~ 1490/1550 nm	> 50 dB
1490 nm ~ 1550 nm	> 50 dB
Optical Connectors ONT, OLT	SC/APC
Internal Fibre optic	SMF-28E
Dynamic Range (dBm)	-35 to 20 (ONT), -55 to 20 (OLT)
Fault locator	
LASER type	FP, 650 nm
Optical Power	-2 dBm (Mono Mode) / Class 2
Intensity Modulation	1 Hz / 50%
Connector	Universal Receptacle 2.5 mm

Power supply	
Battery	Li Ion (7.4 V – 4.8 Ah)
Low Battery screen Indicator	Graphic indicator (four levels)
Battery Charging	By fast internal charger
Mains Adapter AL-103	100 a 240 V AC/ 50-60 Hz / 12 V DC
OP-077-S option	Optical spectrum analyser in C-band
Wavelength range	From 1529 nm to 1564 nm
Dynamic range	From -50 dBm to +20 dBm
Input power per channel	From -50 to +10 dBm
Bandwidth	@1 dB: ± 0.1 nm / @20 dB:± 0.7 nm
Channel separation	100 GHz
Sweep time	2 s (full C band)
Absolute power accuracy	± 1 dB max.
Power repeatability	± 0.1 dB max.
Return loss	-40 dB max.
Operating temperature	From 0 to 50 ºC
Storage temperature	From -40 to 85 ºC
Fibre type	9/125 mm SM
Mechanical Features	
Dimensions and weight	W. 160 x H. 230 x D. 50 mm / 1.4 kg
Included Accessories	
AL-103	Mains Adapter
AA-103	Car lighter charger
FD-90	Carrying bag
CA-005	Mains Cord
	Battery, Instruction Manual