FL41 Optical Fault Locator for Service Activation and Maintenance





The FL41 is a budget friendly and palm-sized Fault Locator/ Optical Power Meter for measuring fiber spans up to 20 km in length. The FL41f has a built-in filter for in-service fault locating. The FL41 is the perfect tool for service activation technicians who need to measure short fiber links and drop fiber for PON, 5G rollout, FTTx, LAN/WAN, and CATV.



Key Features

- Singlemode cable length verification
- Single test port fixed SCAPC connector
- Quick test in less than 35 secs with one touch automatic mode
- In-Service testing with built-in filter
- NoApp[™] QR code generation capability for faster result saving*
- Simple user interface that saves time on the job
- High contrast display with backlight
- Handheld, lightweight rugged design
- Splash and dust resistant design
- Save up to 10 test results
- Micro USB charging point
- Battery autonomy >350 tests

Key Specifications

FL41 Fault Locator with OPM

Optical Fault Locator

- Wavelengths: 1625 nm
- Measurement Range: 60m to 20 km

OPM

- Wavelength range: 1260 to 1680 nm
- Calibrated wavelengths: 1310, 1490, 1550, and 1625 nm
- Measurement range: -35 to 0 dBm

FL41f Fault Locator

- Wavelength: 1625 (F) nm
- Measurement range: 60 m to 20 km
- In-Service Filter isolation: 50 dB
- Class 1 Laser Safety

Test Results Saving and Transfer

A unique QR code method is used to save and transfer measurements results from the FL41 optical fault locator. Simply scan the QR code and process the test data directly on your mobile device. The NoApp[™] feature eliminates the need to download specialized Android or iOS Apps to your mobile device – the QR code embeds all the necessary reporting, commenting, sharing, and uploading.*



VeSion® R-Server Workforce/Productivity System

A centralized server application designed for medium-to-large service providers facing the enormous challenge of managing and coordinating hundreds or even thousands of installations per day. The VeSion R-Server collects field test results for billing/record keeping purposes and simplifies inventory management. Used in conjunction with QR code test reporting function, this back-office application reduces customer call-backs and associated truck rolls, maximizing workforce efficiency and lowering operational costs.



Optical Specifications¹

Fault Locator	FL41	FL41f	
Wavelength (nm)	1625 ±10 nm	1625 ±10 nm	
Passband (nm)	1610 to 1680		
Filter Isolation (dB)	50		
Distance Range (m)	60 m to 20 km		
Distance Measurement Accuracy (%) ^{2,3}	±0.5		
Display Resolution (dB)	0.1		
Laser Safety	Class 1 per 60825-1:2014 edition		
Power Meter ⁴			
Wavelength Range, InGaAs (nm)	1260 to 1680		
Calibration Wavelengths (nm)	1310/1490/1550/1625		
Power range (dBm)	-40 to 0		
Power measurement accuracy, (dB) ¹	±1		
Display Resolution (dB)	0.1		
Optical Connector	fixed SC/APC connector		

Notes

1. At room temperature.

2. For fiber length <10km and reflectance -42 dB.

3. For non-reflectance, distance measurement accuracy can be up to $\pm 2.5\%$.

4. FL41 can be configured as an OPM. FL41f will not support OPM option. Refer to ordering guide.

General Specifications

Size:	129 x 61 x 38 mm (H x W x D) 5.1 x 2.4 x 1.5 in.	Connectivity:	Micro USB interface, data transfer via QR code and web application
Weight:	<205 g (<0.45 lbs.) w/OPM option	Display:	>High contrast, 28 x 23 mm LCD,
Construction:	Rugged, polycarbonate chassis,		96 x 80 pixels with backlight
	1 meter drop tested	Operating Temp:	-10 °C to +50 °C
Battery:	Two alkaline AA or	Storage Temp:	-20 °C to +70 °C
	two rechargeable NiMH, 2150 mAH	Humidity:	0% to 95%, non-condensing
Power Supply:	Micro USB interface,		
	5 VDC adapter/charger		



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