



## Portable optical power meter FibraIn FPPM-345

The portable FibraIn FPPM PON meter is used for optical power measurements in FTTx/PON optical networks with the GPON/GEAPON transmission protocol and optionally with the CATV 1550 nm signal. In contrast to standard power meters, the FibraIn FPPM-345 PON meter has built-in 1310, 1490, and 1550 nm filters that allow simultaneous power measurements at three different wavelengths and operates in the transparent mode (i.e. does not block the optical transmission and is plugged into a link in series), which also enables measurements in both directions at the same time. The FPPM-345 meter operates in a "burst mode", and as such it is able to measure short bit streams sent from GPON/GEAPON network terminations in the assigned time slots. Apart from the "burst mode", the FPPM-345 meter can also operate in the standard CW (continuous wave) mode. The unique features of this device are user-friendly software, a possibility of setting alarm thresholds by the operator, and a large memory with a USB port.

### Functionality:

- **Automatically identifies and measures** 1310, 1490, and 1550 nm wavelengths
- Built-in high isolation **optical filters**
- Transparent mode of operation – allows measurements in an operating network
- Burst mode of operation – allows accurate measurement of 1310 nm in PONs
- **Continuous wave (CW)** mode of operation
- **Bidirectional** measurements
- User-defined warning thresholds
- Large dynamic range
- USB interface for **transferring data to computer**
- Measurement results displayed in linear (mW) or logarithmic (dBm) scale
- **Built-in batteries**, battery recharger included
- Protective rubber cover
- Backlit LCD screen
- Low battery consumption, long battery life



Technical data			
<b>Optical parameters</b>			
Measured wavelengths	1310 nm	1490 nm	1550 nm
Passbands	1260-1360 nm	1470-1505 nm	1535-1570 nm
Dynamic range	+10/-40 dBm	+10/-45 dBm	+23/-45 dBm
Isolation relatively to other channels	min. 40 dB	min. 40 dB	min. 40 dB
Insertion loss		max. 1.5 dB	
Measurement accuracy		+/- 0.5 dB	
Measuring units		dBm, mW	
Resolution		0.01 dB	
PDL		max. 0.25 dB	
Operation modes		Burst mode / CW	
Warning threshold setting		Yes	
Connector type		SC APC	
<b>Other functional parameters</b>			
Battery running time	1100 min		
Auto Off function	Yes		
Backlit display	Yes		
Data storage	Yes		
PC interface software	USB		
Memory	100 records		
Battery recharge interface	Power jack		
<b>Mechanical and environmental parameters</b>			
Weight	450 g		
Dimensions	90x200x43 mm		
Display	LCD, 2.8"		
Working temperature	-10/+60 ° C		
Humidity	10%/90% no condensation		