AFL Telecommunications
A Fujikura Business

telecom unitronics

Optical Power Meters

Optical power meters may be used to measure optical power in premises, telco, or broad-band fiber optic networks. When used with an LED or laser light source, an OPM can also measure the attenuation (insertion loss) of multimode or single-mode cables.

OPM 1 - Measures Optical Power in dBm

With only two controls – Power and Wavelength – the OPM 1 is our simplest to use optical power meter. Optical power in dBm and the calibration wavelength setting are displayed on an easy to read LCD display.

OPM 4 - Adds Wave ID and Set Reference

The OPM 4 offers automatic wavelength identification and switching when used with Wave ID light sources. The OPM 4 stores optical references for each calibrated wavelength. An easy to read Dual Wavelength LCD display with Backlight shows measured power [dBm or µW] or insertion loss [dB], calibrated wavelengths, tone signal [Hz], wavelength ID, and the battery charge status.

OPM 5 - Adds Wave ID and Data Storage

The OPM 5 offers automatic wavelength identification and switching when used with Wave ID light sources. The OPM 5 stores optical references for each calibrated wavelength. An easy to read Dual Wavelength LCD display with Backlight shows measured power [dBm or µW] or insertion loss [dB], calibrated wavelengths, tone signal [Hz], wavelength ID, and the battery charge status. Up to 500 records per wavelength of power or insertion loss measurements may be stored in internal non-volatile memory. Using the supplied Windows® compatible software and USB connection, test records may be transferred to a PC for storage, display, printing, and analysis.

Specifications

MODEL	OPM 1-2C	OPM 1-3C	OPM 4-1D	OPM 4-2D	OPM 4-3D	OPM 4-4D	OPM 5-2D	OPM 5-3D	OPM 5-4D
Calibrated wavelengths (nm)	850, 1300, 1310,1550	850, 1300, 1310,1550	660, 780, 850	850, 1300, 1310,1550	850, 1300, 1310,1550, 1625	850, 980, 1310,1490, 1550, 1625	850, 1300, 1310, 1550	850, 1300, 1310,1550, 1625	850, 980, 1310,1490, 1550, 1625
Detector type	Germanium	InGaAs	Silicon	Germanium	InGaAs	Filtered InGaAs	Germanium	InGaAs	Filtered InGaAs
Measurement range (dBm)	+6 to -60	+6 to -70	+6 to -70	+6 to -60	+6 to -70	+26 to -50	+6 to -60	+6 to -70	+26 to -50
Measurement units	dBm	dBm	dB, dBm, µW	dB, dBm, µW	dB, dBm, µW	dB, dBm, µW	dB, dBm, µW	dB, dBm, µW	dB, dBm, µW
Power	9 volt	9 volt	2 x AA batteries, optional NiMH	2 x AA batteries, optional NiMH	2 x AA batteries, optional NiMH	2 x AA batteries, optional NiMH	2 x AA batteries, optional NiMH or AC	2 x AA batteries, optional NiMH or AC	2 x AA batteries, optional NiMH or AC
Wavelength ID	—	—	yes	yes	yes	yes	yes	yes	yes
Set reference	—	—	yes	yes	yes	yes	yes	yes	yes
Tone Detect*			yes	yes	yes	yes	yes	yes	yes
PC software & storage	—	—	—	—	—	—	yes	yes	yes

* 270 Hz, 330 Hz, 1 kHz, and 2 kHz Tone detection.