

## OM120N-I Operating instructions:

Product: AF-OM120N-I

Date: Mar:2013

Rev: 01

Control Key's: (All key's are rubber key pads)

1. On\Off
2. Backlight
3. Wavelength Select (850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm)
4. dB\dBm with mW Displayed
5. Set Resolution in dBm mode or Zero reference in dB mode

Backlight Key allows the user the option to turn the display backlight on.

The Wavelength select key allows the user to select between the calibrated wavelengths of the OM120N-I. All wavelengths are calibrated to +/- 0.3 dB of the NIST standard.

The dB\dBm select key allows the user to select between absolute power, which is measured in dBm, or relative power that is measured in dB. dBm is referenced to 1 milliwatt and both are a function of the log scale.

The Rez key when in the **dBm mode** allows the users to toggle the resolution between 0.01dB and 0.1dB.

The Zero reference key when in the **dB mode** allows the user to set the input launch power to a relative dB zero reference value for easy calculation of loss and attenuation of a fiber optic cable. For instance, if a launch cable output power value is  $-5.6$  dBm and a test cable is inserted between the launch cable and the meter with a reading of  $-7.1$  dBm, the user has to subtract  $-7.1$  dBm from  $-5.6$  dBm to get a result of  $-1.5$  dB. As simple as this test sounds it can sometimes get confusing to the user due to the fact that they are not sure if their result should be a positive value or a negative value also miscalculation can be an issue. The zero reference function eliminates these problems. The user simply sets their reference value (which in this case is  $-5.6$  dBm) to 0.0 dB then inserts the test cable to get a loss reading of  $-1.5$  dB. **\*EASY\***

Different references can be stored for all four wavelengths. The stored reference value will be maintained until a new reference is stored.

The screen also displays the value that the user has referenced too at the bottom left corner of the screen. This reading is the dBm (absolute) value of the users dB zero reference value.

*\* The OM120N-I also offers an **auto power down** feature. This is selectable on power up. User can select one of three options → 1) no Auto Power off 2)AO10 – power down after 10 minutes 3) AO30 – power down after 30 minutes.*

ADVANCED FIBER SOLUTIONS

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## ***AF-OM120N-I Fiber Optic Power Meter***

The AF-OM120N-I is our next generation unit replacing the popular AF-OM150A. It features an extended battery life (100+ hours) and larger display for optimal viewing.

<b>OM-120N-I</b>	<b>SPECIFICATIONS, KEY FEATURES AND APPLICATIONS</b>
Applications	Multimode, Single-mode, Outside Plant and Premise
Detector Type	1mm Ger in Modular Housing
Calibrated ( $\lambda$ )Wavelength	850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm
Accuracy	+/- 0.25 dB (20.0dBm@1310nm) (NIST Traceable)
Measurement Units	dBm (absolute)/Watts - dB (relative)
Resolution	0.1 dB or 0.01dB (Selectable)
Dynamic Range	+3 dBm to -55 dBm
Controls	5 Soft Buttons
Buttons	On/Off, Backlight, $\lambda$ , dB-dBm/W, Resolution/Zero Reference
Power	9V Battery or AC Power Converter
Low Battery Indicator	Yes
Tone Detection	270hz, 330hz, 1khz & 2khz
Display	Graphical LCD with Backlight
Adaptor Options	ST, SC, FC, 2.5mm Universal, LC and 1.25mm Universal
Auto-Shutdown	Yes
Enclosure Size	Compact Handheld (L-4.94"/W-2.75"/H-1.2")
Operation Temperature	-10°C to +50°C (45% Hum, non condensing)
Storage Temperature	-20°C to +60°C (75% Hum, non condensing)
Warranty	One Year From Factory Ship Date

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*Advanced Fiber Solutions reserves the right to make engineering improvements or changes without notice.*