

## Fibre Optic Test Set – For standardised testing of multimode systems including large core fibres.

This rugged, high quality dual light source and power meter are designed to allow testing of both large core (>200µm) and standard multimode (OM1-4, 62.5/125 and 50/125 µm) fibre sizes accurately and all in a single test set. The results achieved when measuring short haul (<200-300m) multimode systems depend heavily on the distribution of the light launched into the fibre under test. With unknown, unconditioned light distribution the test results will be misleading and potentially erroneous. This test set was designed to ensure that accurate, repeatable measurements can be made for applications that use either standard OM1 - 4 or large core fibre. The output light distribution from both ports of the light source is controlled so that you know the measurement taken provides a reliable and representative test for your system.



### Features and Benefits

#### Dual Conditioned Light Source (AVT-121)

- Dual light source supports legacy and modern test requirements in a single unit
- 810nm conditioned light source conforming to the J56.019 standard
- Designed for JN1008B-LA (EN4532) 200/280µm and other large core fibres
- 850nm conditioned 85/85 launch for 50/125 fibre optics cables
- Constant Wave (CW) and 1kHz (MOD) modulation.
- Ruggedised individual Case
- Rechargeable / Mains or dry cell power options
- Available singularly or as a kit with power meter, light source, test leads all in a ruggedised case

#### Power Meter (AVT-122)

- Multi wavelength analysis
- Reference and absolute power measurements
- Auto off settings
- Choice of units (mW/dBm)
- Ruggedised individual Case
- Rechargeable / Mains or dry cell power options
- Available singularly or as a kit with power meter, light source, test leads all in a ruggedised case

## Technical Specifications

### Dual Conditioned Light Source AVT-121

Wavelength:	810nm	850nm
Source Type:	LED	VCSEL
Special Characteristics:	810nm $\pm$ 20nm	850 $\pm$ 20nm
Special FWHM:	50nm	
Output Waveform:	Continuous wave or internally chopped at 1kHz	
Output Level:	-20dBm in 50/125 Multimode fibre	
Output Stability:	$\pm$ 0.1dB or less over 1 hour at 23°C	
Optical Connector:	Fixed FC (Alternatives available: please specify when ordering)	
Power Requirements:	2 x AA rechargeable NiMH cells using external charger (supplied) gives typically 20 hours use. Alkaline cells may be used if rechargeable batteries are flat and mains is not available	
Operating Temperature Range:	0 - 50°C	
Dimensions:	152 x 83 x 33mm	

### Power Meter AVT-122

Wavelength:	810nm / 850nm
Sensor Type:	Silicon
dB Relative Mode:	Yes
Display:	4 Digit LCD displays dBm, dB
Measurement Range:	+5 to -72dBm
Measurement Accuracy:	$\pm$ 5% at -23dBm
Resolution:	$\pm$ 0.1dB
Optical Connector:	FC (adapter caps also available for ST, SMA, FC/PC, SC, Diamond, FDDI, please enquire)
Power Requirements:	Alkaline PP3 giving 25 hours operation, auto power off after 20 minutes except in dBrel
Operating Temperature Range:	0 - 50°C
Dimensions:	152 x 83 x 33mm

AVOptics is also able to supply ruggedised test leads to ensure correct interfacing with most connector types; including those specific for larger core fibres such as HA (JN1055), RSC, Mil-PRF-28504, F-SMA, ST and FC. Please call or email for more details.



Termination and Field Repair Kits



Tooling solutions



Polishing Equipment



Optical and Electrical Harnesses



Training and Consultancy