



BUY – SELL – REPAIR – CALIBRATE sales@simbol.ca 1-866-396-6248

Simbol Test Systems is the one-stop shop for all your fiber optic test equipment and measurement needs. As we are exclusively focused on e-commerce and international distribution of photonic products since 2000, our customers rely on the <a href="AssetRelay">AssetRelay</a> catalog to find our stock listings of thousands of used and refurbished popular test equipment. They know they can get repair, customization and calibration services from our laboratory for their own fiber optic instruments from all renowned brand manufacturers.

If you wish to buy optical equipment or get it repaired, don't hesitate to contact either our used sales division <a href="https://www.assetrelay.com">www.assetrelay.com</a> or our distribution and repair service group at <a href="https://www.simbol.ca">www.simbol.ca</a>.

# If you need repairs, trust the Simbol Test Systems expertise

With more than 25 years of expertise in repairing OSA, Tunable Lasers, Wavemeters, Laser drivers and controllers, Power meters, Optical Switches and many more, the quality of our services is renowned amongst the service centers community and highly appreciated by our partners and customers. We developed custom software allowing us to perform automatic calibration tests and write up to date results in Ando (Yokogawa) the Optical Spectrum Analyzer calibration tables. We developed many calibration procedures with custom software allowing fast testing of attenuators, switches, wavemeters and TLS. In fact, Simbol is the most experienced repair center for HP, Agilent and Keysight large Tunable Laser modules. Don't settle for a two-page summary assessment to trust that the optical equipment you send out for repair or calibration is operating properly; our report contains the complete table of all results, confirming it has **really** been tested. A report from other labs with little data reflects a not completely calibrated unit. So be careful of other sellers saying their equipment is "tested good", "powered on, self-tested", "pulled from a working environment".

# If you need to buy a machine, trust AssetRelay

All equipment sold by AssetRelay is serviced by Simbol Test Systems and will go through a series of tests to ensure it meets or exceeds the manufacturer's published specifications. But if stated otherwise, all equipment is shipped with a comprehensive calibration/test report showing all tests performed and passed. A dated calibration sticker is affixed on the machine. When you choose AssetRelay, you can be confident that we actually test everything we sell so you know it will work when it gets to your workplace. If you are an international buyer (we are based in Canada), we manage most documents needed so your equipment gets through the border of your country swiftly. We have been doing this for over 25 years and know that proper customs documents are needed.

Traceability: Instrumentation used during this calibration is traceable to N.I.S.T (National Institute of Standards and Technology) or C.N.R.C. (Canadian National Research Council.

#### Backreflection Meter

The JDS Uniphase Backreflection Meter is a portable, direct-display instrument used for the convenient measurement of backreflection, insertion loss, and power of connectors, components, and systems. With a single output port, the meter is ideal for jumper manufacturers.

The meter can be equipped with one or two built-in laser sources. Sources available are: 850, 1310 and 1550 nm for multimode meters, and 980, 1310, 1480, 1490, 1550, 1625, and 1650 nm for single-mode meters.

The use of an FC/APC ultra-low backreflection connector on the output port enables the use of hybrid jumpers to accommodate measurements with various connector types without compromising the backreflection measurement range. When a device under test (DUT) is connected to the jumper and the DUT output is terminated, the backreflection of the DUT is displayed. The meter's superior optics are very stable at low backreflection levels. Insertion loss and power can be measured to - 80 dBm.

Other features include compensation for extraneous backreflection, user-adjustable calibration, an internal rechargeable battery for field portability, a transit carrying case, and a convenient foot pedal for data logging to a computer or serial printer via the instrument's serial port.

## Safety Information

Complies to CE requirements plus UL3101-1 and CAN/CSA-C22.2 No. 1010.1

Meets the requirements of Class 1 in standard IEC 60825-1(2002) and complies with 21CFR1040.10 except deviations per Laser Notice No. 50, July 2001.

CLASS 1 LASER PRODUCT (IEC 60825-1, 2002)



#### **Key Features & Benefits**

Wide wavelength range

Insertion loss and backreflection capability

Typical backreflection power sensitivity of - 75 dB

Insertion loss and power measurements to - 80 dBm

Convenient foot pedal for data logging

Multiple connector test system (MCTS) application software

Direct display of measured backreflection, power, or insertion loss

Compensation for extraneous backreflection for accurate backreflection measurements

Calibration can be verified using calibrated reference jumpers

User-calibration mode

Transit case for safer and easier portability

## **Applications**

Connector backreflection/loss testing

Component testing

Installation verification

Quality assurance acceptance testing

#### **Backreflection Meter**

#### **Specifications**

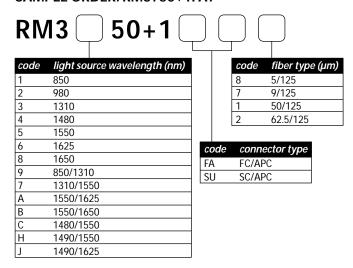
PARAMETER	SINGLE-MODE		MULTIMODE
	(5/125 µm)	(9/125 μm)	(50/125 µm and 62.5/125 µm)
Operating wavelengths	980 ± 10 nm	1310, 1480, 1490, 1550, 1625, 1650 ± 10 nm	850, 1310, 1550 ± 20 nm
Backreflection range	0 to - 65 dB1	0 to - 75 dB	0 to - 40 dB <sup>1</sup>
Relative accuracy - backreflection	$\pm 0.4 dB^2$		± 0.7 dB <sup>3</sup>
Detector type	2 mm InGaAs		3 mm InGaAs
Power range	0 to - 80 dBm		0 to - 60 dBm
Absolute power accuracy	± 0.25 dB (typical) at - 10 dB <sup>4,5</sup>		± 0.25 dBm (typical) at - 10 dBm <sup>5</sup>
Relative accuracy - power	± 0.05 dB (< 5 dB loss), ± 0.15 dB (> 5 dB loss) <sup>4</sup>		± 0.15 dB <sup>5,6</sup>
Remote interface	RS232 (GPIB optional)		
Input voltage	100 - 240 V AC, 50 - 60 Hz		
Power consumption	30 VA maximum		
Display	16 character LCD		
Dimensions (W x H x D)	26 x 11 x 26 cm		
Weight	4 kg		
Operating temperature	0 to 40 °C		
Storage temperature	- 40 to 70 °C		
Humidity	Maximum 95% RH from 0 to 40 °C		

- 1. Reduced backreflection accuracy in the last 10 dB of range based on termination effectiveness. Depending on the measurement setup, measurements with lower levels are possible at reduced accuracy.
- 2. For a typical application add  $\pm~0.4~dB$  for readings between 60 and 67 dB. Add  $\pm$  0.8 dB for readings between - 67 and - 72 dB. Add  $\pm$  1.5 dB for readings between - 72 and - 75 dB.
- $3. \;$  Following the user-calibration procedure at the recommended interval. For simple reflections, such as flat-end connectors.
- 4. Add  $\pm$  0.1 dB between 70 and 80 dBm.
- 5. Immediately after performing a dark measurement. Not including the 1650 nm source.
- 6. Add  $\pm$  0.1 dB between 0-3 dBm and between 35 and 40 dBm.

## Ordering Information

Indicate your requirements by selecting one option from each configuration table. Print the corresponding codes in the available boxes to form your part number.

SAMPLE ORDER: RM3750+1FA7



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INSTRUMENTATION LITERATURE REQUEST

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