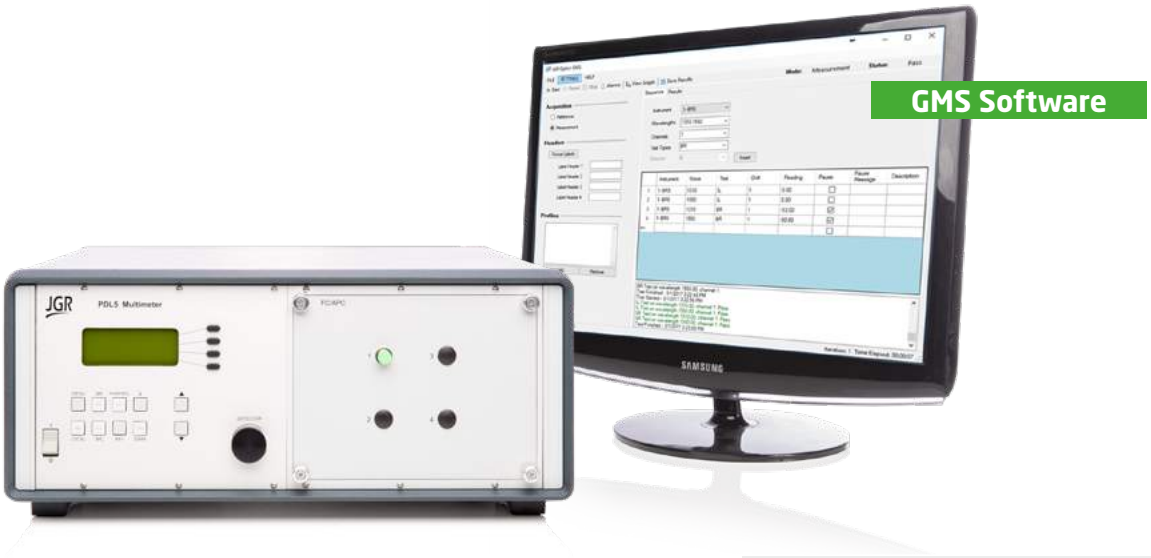
PDL5 Polarization Dependent Loss Meter



Product Description

The PDL5 PDL/IL/BR Multimeter is built on top of stable and proven MBR5 meter technology and is taken to the next level. Improved source isolation, electronics, optics, and continuous laser power referencing enhance the performance to allow for repeatable and stable measurements. The meter is capable of providing facilities with the PDL, IL and average loss with up to 0.001 dB as well as a backreflection resolution of 0.1 dB.

The PDL5 is a practical choice for many types of fiber optical component testing. It is available with up to 4 internal sources (1310/1490/1550/1625/1650 nm), calibrated external inputs, or multiple detectors.

An intuitive display and keypad simplifies the collection and management of measurement data allowing quick access to the test results from various channels. The meter may be controlled through remote interface (GPIB, RS232, or USB*) or locally via the user-friendly front panel keypad and display. The PDL5 and GMS Software can be used paired with an SX8 switch. All our PDL5 meters come standard with our GMS Software at no additional cost.

*USB interface via-USB-DB9 adapter

KEY FEATURES

- Ultra Stable and Accurate PDL, IL ave. loss and BR measurements
- Up to 4 Internal Lasers
- Up to 2 Output Channels or 2 Detectors
- 4 or 6 states Mueller matrix methods
- Resolution down to 0.001 dB
- ~1 second PDL Measurements

APPLICATIONS

- Optical Component Testing
- Incoming Inspection
- QA Testing

COMPLIANCE

- UL/CSA 61010
- IEC 61010
- IEC 60825-1 Class 1
- FCC Part 15 (Class A)
- EN 61326 (Class A)

IN THE BOX

- PDL5 Meter
- AC Power Cord
- Calibration Certificate
- Calibrated Jumper
- Hybrid Test Jumper
- Detector Cap
- FC Detector Cap
- MW3 Mandrel Wrap

The PDL5 meter achieves typical PDL accuracy down to ±0.005 dB and average loss and IL accuracy down to ±0.05 dB. The meter achieves ultra-stable backreflection measurements at very low values. Accuracy is typically ±0.4 dB and measurement sensitivity is to –75 dB.

*USB interface via USB-DB9 adapter

Ordering Scheme

PDL5- □□ - □ □ □ □ - □ -09FA □ □ □

OUTPUT CHANNELS	
1-channel	01
2-channel	02

LASER 1	
No Laser	0
1310 nm	3

LASER 3	
No Laser	0
1550 nm	5

DETECTOR TYPE	
2mm InGaAs	2
5 mm Ge	5
Cavity	C

DETECTOR	
Front Panel Leave Blank	
Remote Head	R

LASER 2	
No Laser	0
1490 nm	4

LASER 4	
No Laser	0
1625 nm	6
1650 nm	7

INPUT	
None Leave Blank	
External	E

NUMBER OF DETECTORS	
1 Detector Leave Blank	
2 Detectors	2

*Additional options may be available upon request

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Specifications

OPTICAL / ELECTRICAL SPECIFICATIONS		
Parameter	**Specification**	
Fiber Type (µm)	SMF-28e (9/125)	
Operating Wavelengths (nm)	1310 / 1490 / 1550 / 1625 / 1650/ Ext	
Detector Type	2mm InGaAs	5mm Ge
Power Range (dBm)	5 to -80	5 to -60
PDL Accuracy		
1550	+/-(0.005dB + 2% of PDL)	+/-(0.010dB + 2% of PDL)
1310/1490/1625/1650	+/-(0.010dB + 2% of PDL)	+/-(0.015dB + 2% of PDL)
PDL Calculation method	Mueller Matrix	
PDL Dynamic Range (dB)	0 to 3	
Absolute Power Accuracy (dB)[1]	+/-0.25	
Relative Power Accuracy (dB)	+/-0.05	
PDL Measurement time (s)[2]	0.7	
Backreflection Range (dB)	0 to -75	
Backreflection Accuracy (dB)[3]	0.4	
Remote Interface	GPIB / RS-232 / USB[4]	
Input Voltage	100 - 240 V AC, 50 - 60 Hz	
Power Consumption (VA)	80 maximum	
Display	4 lines, 16 character per line, LCD	

Notes:

1. *Measured at -10 dBm.*
2. *4-state mode. 1.2s in 6 state mueller matrix mode.*
3. *Add 0.1 dB to the spec for every 1dB below -60dB.*
4. *USB interface via USB-DB9 adapter.*

MECHANICAL / ENVIRONMENTAL SPECIFICATIONS	
Parameter	**Specification**
Unit Dimensions W x H x D (cm)	36 x 15 x 34
Shipping Box Dimensions W x H x D (cm)	43 x 27 x 47
Unit Weight (kg)	9
Total Shipment Weight (kg)	10
Operating Temperature (°C)	0 to 40
Storage Temperature (°C)	–40 to 60
Humidity (Non-condensing)	Maximum 95% RH from 0 to 40