

IL/RL/PDL Test Platforms



Bola Insertion Loss, Return Loss, Polarization Dependent Loss Test Platforms are highly reliable, providing fast, accurate, and repeatable measurements over a wide range of user-defined configurations optimized for flexibility and throughput. Bola IL/RL/PDL test sets can be configured to meet specific customer requirements.

Key Applications

Laser Sources Available	Tunable DFB FP VCSEL
Power Meter Range	+23 to -85 dB
Insertion Loss Accuracy	< 0.02 dB
Return Loss Accuracy	± 0.4 dB
Polarization Dependent Loss Accuracy	< 0.4 dB

Mechanical/Environmental Specifications

Parameter	
Dimensions, W x H x D (cm)	25 x 11 x 33
Weight (kg) ¹	3.2 ²
Operating Temperature (°C)	0 to +40
Storage Temperature (°C)	-30 to +80
Humidity (non-condensing, °C)	85 %

¹ For 2Ch Fixed Laser Sources, IL/RL Test Platform. Actual values will vary depending on configuration.

² With power meter head

INSERTION LOSS, RETURN LOSS, POLARIZATION DEPENDENT LOSS (AND RELATED MEASUREMENTS) IN ANY COMBINATION

FROM 1 TO 48 CHANNELS

SINGLEMODE & MULTIMODE SOURCES, FIXED OR TUNABLE

HIGH THROUGHPUT UNIDIRECTIONAL OR BIDIRECTIONAL TESTING



Mix + Match + Integrate

Bola Configurable IL/RL/PDL Test Platforms can be configured in countless configurations, with any combination of IL/RL/PDL and associated measurements such as ripple, adjacent channel loss, filter bandwidth, and more. Laser sources, fixed, swept, singlemode and multimode over a wide wavelength range, can be selected and mixed and matched to meet exact testing requirements.

The Bola IL/RL/PDL Test Platforms can be seamlessly integrated with other Bola Configurable products such as Optical Switches, Variable Optical Attenuators, Optical Power Meters, and more.

Confer with your Bola representative for more information on the Bola Optical Test Platforms and to configure a Bola IL/RL/PDL Test Platform for your unique requirements.

Optical/Electrical Specifications

Parameter	Swept SM	Single Mode	Multimode
Wavelength Range (Power Meter) (nm)		850 to 1700	
Source Outputs Available (nm)	O-Band, C-Band, L-Band, C+L-Band	1310, 1490, 1550, 1625	850, 980, 1310
Source Wavelength Accuracy (nm)	± 0.002 Typical	± 5	
Source Output Power (dBm)	≥0		
Fiber Type	9 μm Single Mode PM	9 μm Single Mode	50 μm or 62.5 μm
Detector Type	InGaAs/Si		
Power Meter Measurement Range (dBm)	+3 to -85		
Absolute Power Accuracy (dB)	± 4% (850/980/1310/1490/1550/1625 nm)		
Insertion Loss Measurement Range (dB)	80		
Insertion Loss Relative Accuracy (dB) ¹	<0.02 Typical		
Return Loss Measurement Range (dB)	70		55
Return Loss Relative Accuracy (dB) ²	±0.4		
Polarization Dependent Loss Uncertainty (dB)	0.05	0.01	N/A
Polarization Dependent Loss Repeatability (dB)	0.05	0.01	N/A
Measurement Time (s)	≤0.01 ³	≤10	N/A
AC Power (50-60 Hz)	100 – 240 V AC		
Power consumption (VA)	<10		
Remote Interface	RS-232 or USB		
Recalibration Period (Years)	2		

¹ 0 to -60 dB, ² 0 to -50 dB, ³ Per Wavelength, plus approximately 10s for PDL

IL/RL/PDL Ordering Diagram

