

Return loss module specifications with internal source (for use with external sources the specifications of 81610A return loss module apply)

All modules require angled contact (8°) at input and output connectors

	81611A	81612A	81613A	81614A
Source	Fabry-Perot Laser (internal)			
Output Power	typ. – 4dBm			
Center wavelength [1]	1310 nm ±20 nm typ.	1550 nm ±20 nm typ.	1310/1550 nm ±20 nm typ.	1550/1625 ±20 nm typ.
Sensor Element	InGaAs			
Fiber Type	Standard single-mode 9 / 125 μm			
Dynamic Range	75 dB			
Relative uncertainty of Return Loss (RL)	User calibration [2]		Plug and play [3]	
• RL ≤55 dB	< ±0.5 dB (typ. < ±0.3 dB)		typ. < ±0.6 dB	
• RL ≤60 dB	< ±0.6 dB (typ. < ±0.4 dB)		typ. < ±1.5 dB	
• RL ≤65 dB	< ±0.8 dB (typ. < ±0.5 dB)			
• RL ≤70 dB	< ±1.9 dB (typ. < ±0.8 dB) [4]			
• RL ≤75 dB	typ. < ±2.0 dB [4]			
Total uncertainty	add ±0.2 dB		add typ. ±0.2 dB	
Dimensions (H x W x D)	75 mm x 32 mm x 335 mm (2.8" x 1.3" x 13.2")			
Weight				
Recalibration period	2 years			
Operating temperature	10 to 40°C			
Humidity	Non-condensing			
Warm-up time [5]	20 minutes			

[1] At 25°C constant temperature, coherence control on, warm-up time after laser turn on > 5 min.

[2] Averaging time 1s, calibration prior to measurement, constant temperature, coherence control on, warm-up time after laser turn on > 5 min, length of measurement patchcord ≥2m, angled connector in optimal optical condition. Reference cable 81610CC used for total uncertainty.

[3] Use defaults settings (no user calibration necessary): length of measurement patchcord ≤ 2m, return loss of connectors ≥70 dB.

[4] For measurements performed immediately after calibration.

[5] Warm-up time 60 min, if previously not stored at the same temperature.

Laser Safety Information

The above products are classified as Class 1 according to IEC 60825-1 (2001).

All laser sources comply with 21 CFR 1040.10 except for deviations pursuant to Laser Notice No. 50, dated 2001-July-26.

