

Return loss module specifications

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

81610A	
Source	external input only [1]
Sensor element	InGaAs
Fiber type	Standard single-mode 9 / 125 μm
External input	max input power: 10 dBm min input power: 0 dBm damage input power: 16 dBm
Wavelength range for external input	1250 nm to 1640 nm
Dynamic range	70 dB
Relative uncertainty of [2] Return Loss (RL)	with broadband source with Agilent FP sources
• RL ≤55 dB	< ±0.25 dB typ. < ± 0.5 dB
• RL ≤60 dB	< ±0.3 dB typ. < ± 1.0 dB
• RL ≤65 dB	< ±0.65 dB typ. < ± 2.0 dB
• RL ≤70 dB	< ± 1.7 dB
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	0.6 kg
Recalibration period	2 years
Operating temperature	10 to 40°C
Humidity	Non-condensing
Warm-up time [5]	20 minutes

^[1] Insertion Loss is in the range of 7dB.

^[2] Averaging time 1s,
calibration prior to measurement,
constant temperature,
Broadband source: Agilent 83438A
FP Sources: Agilent 81650A, 81651A, 81652A, 81654A
with active Coherence Control.
Reference Cable 81610CC used for total uncertainty
Length of measurement patchcord ≤ 2m,
angled connector in optimal optical conditions

^[3] Warm-up time 60 min, if previously not
stored at the same temperature.

Reference Cable Specification

(To connect to Return Loss Modules the cable requires connector Interface 81000SI DIN47256/4108)

81610CC Reference cable	
Return loss	as printed on cable
Return loss uncertainty	±0.2 dB ^[1]
Wavelengths	1310 and 1550 nm ± 15 nm
^[1]	Clean reference reflector in perfect optical condition (Do not use with contact-type connectors)