

### Measure insertion loss, return loss and length on multimode and single-mode fiber optic networks



#### **Features**

- Bi-directional testing on up to 2 fibers at once
- Pass/Fail certification to ISO/IEC/TIA/IEEE and custom test limits
- Automatic dual-wavelength identification (Wave ID)
- Test cord reference wizard and built-in encircled flux compliance
- Integrated power meter and visual fault identifier
- 12-fiber MPO certification with optional Multi-fiber switch (MFS)
- Reporting with TRM® PC software and optional cloud-based workflow integration with aeRos®

#### **Applications**

- Certify Tier 1 networks to industry standards
- Test LAN structured cabling and data center networks with single fiber (LC, SC, FC, ST) and multi-fiber (MTP/MPO) connectivity
- Test access, metro and core networks
- Document network installations

AFL's ROGUE OLTS Certifier measures insertion loss, return loss, and length bi-directionally to industry standards on both multimode and single-mode networks. ROGUE OLTS Certifier is offered as a matched pair of units, with each unit featuring 4 test ports. Two of the ports combine a light source and power meter to enable bi-directional testing on single or dual fibers. The other two ports are a dedicated power meter and a visual fault identifier (VFI) to help troubleshoot networks.

ROGUE OLTS Certifier is available as an intelligent base (iB1) model with an integrated display. It can provide either single-fiber testing on quad SM/MM wavelengths (850/1300/1310/1550 nm) or single and dual-fiber testing at 1310/1550 nm.

**Test Management and Reporting Software:** All ROGUE OLTS Certifier kits include a basic license for Test Result Manager (TRM® 3.0) providing data processing and reporting locally via a PC. The optional aeRos® Pro test management software provides cloud-based workflow integration to remotely build projects, assign jobs, collect results, track progress and generate reports.



## **Specifications**<sup>a</sup>

OLTS	MULTIMODE	SINGLE-MODE	
Emitter Type	LED	Laser	
Wavelengths	850 ±30 nm; 1300 ±20 nm	1310, 1550 ±20 nm	
Safety Class	Class   FDA 21 CFR 1040.10 and 1040.11, IEC EN60825-1: 2007-03		
Detector Type	InGaAs InGaAs		
Launch Condition	Encircled Flux Compliant <sup>b</sup>	N/A	
Length Measurement Range	5 km	200 km (SMF28e)	
Power Measurement Range	asurement Range +3 to -60 dBm +3 to -60 dBm		
Output Power	-24/-23 dBm, 62.5/50 μm -3 dBm, 9 μm		
Stability <sup>c</sup>	±0.1 dB over 1 hour ±0.15 dB over 8 hours	±0.1 dB over 1 hour ±0.15 dB over 8 hours	
Wave ID Transmit	Yes	Yes	
Tone Generation	330 Hz, 1 kHz, 2 kHz 330 Hz, 1 kHz, 2 kHz		
Input Connector	Interchangeable connector adapter (LC standard, SC, ST, FC optional)		

OPTICAL POWER METER (OPM)		
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550, 1625, 1650 nm	
Detector Type	InGaAs PIN, 2 mm diameter	
Measurement Range	+3 to -70 dBm	
Wave ID	Automatically synchronizes and measures 1, 2 or 3 λ Wave ID combinations	
Range	+3 to -40 dBm @ 850 nm; +3 to -50 dBm @ 1300, 1310, 1550 nm	
Tone Detect	Auto-detects 270, 330 Hz; 1, 2 kHz tones;	
Accuracy	±5% @-10 dBm	
Linearity	±0.1 dB (-3 to -40 dBm); ±0.25 dB (-40 to -50 dBm)	
Measurement Units	Power in dBm, nW, µW, mW; Loss in dB; 0.01 dB resolution	

VISUAL FAULT LOCATOR (VFL)		
Emitter Type	Visible red laser, 650 ±20 nm	
Safety Class	Class II FDA 21 CFR 1040.10 and 1040.11, IEC EN60825-1: 2007-03	
Output Power (nominal)	0.8 mW into single-mode fiber	
Modes	CW and 2 Hz flashing	

GENERAL	iB1	
Size	23.5 x 13.3 x 7.6 cm (9.25 x 5.25 x 3.0 in)	
Weight	1.56 kg (3.46 lb)	
Operating Temperature	-10 °C to +50 °C, 0 to 90 % RH (non-condensing)	
Storage Temperature	-20 °C to +60 °C, 0 to 90 % RH (non-condensing)	
Power	Rechargeable Li-lon or AC power adapter	
Battery Life	>8 hours continuous testing	

#### Notes

- a. All specifications valid at 23°C  $\pm$ 2°C (73.4°F  $\pm$ 3.6°F) unless otherwise specified.
- b. TIA-526-14-B,ISO/IEC 14763-3 and IEC 61280-4-1.
- c. After 15 minutes warm-up.



## **Ordering Information**

Each ROGUE OLTS Certifier kit includes two (2) of each: ROGUE iB1 Base, kit-specific ROGUE Modules, battery, AC charger, carry strap, carry case. Each ROGUE OLTS Certifier kit includes (1) One-Click Cleaner SC/2.5 mm, (1) One-Click Cleaner LC/1.25 mm, switchable test port adapters and test accessories.

DESCRIPTION	CONTAINS (two of each)	AFL NO.
ROGUE OLTS Certifier kit with iB1 Base, Quad SM/MM	ROGUE iB1 Base, Quad SM/MM Module, battery, AC charger, adjustable carry strap, carry case	RGK-CERT01B1
ROGUE OLTS Certifier kit with iB1 Base, Dual SM ports	ROGUE iB1 Base, Dual Ports SM Module, battery, AC charger, adjustable carry strap, carry case	RGK-CERT03B1

#### **ROGUE Hardware and Accessories**

DESCRIPTION	AFL NO.
ROGUE OLTS with iB1 Base; contains ROGUE iB1 Base, Dual Ports SM Module, battery, AC charger, adjustable carry strap	RGK-OLTS03B1
ROGUE iB1, Intelligent Base; contains ROGUE iB1 Base, battery, AC charger, adjustable carry strap	RG-B01
ROGUE OLTS Certifier Quad Module; contains Quad Module; test port adapters: (2) SC for OLS port, SC and LC for OPM port	RG-1100-Q01
ROGUE OLTS Certifier SM Module; contains SM Module; test port adapters (2) SC for OLS port, SC and LC for OPM port	RG-1100-S01-D
ROGUE Kit Carry Case	RGA-CASE-01
ORL Referencing Mandrel	5400-00-0200
Adjustable Carry Strap	RGA-STRAP-01
AC charger for cB1 Base	4050-00-0132PR
AC charger for iB1 Base	4050-00-0918PR
Reference cable, SC/UPC-LC/UPC, SMF28E/E+, 2 m	8700-00-0081
Reference cable, SC/APC-LC/UPC, SMF, 2 m	8700-00-0050
Reference grade cable, SC/UPC-LC/UPC, MMF, 50 μm, OM4, 2 mm, Red, 2 m	



ROGUE OLTS Certifier kit with iB1 Bases



## **ROGUE OLTS Certifier Adapters**

DESCRIPTION	TEST PORT USAGE	AFL NO.
FC	OLS	2900-50-0002MR
SC	OLS	2900-50-0003MR
ST	OLS	2900-50-0004MR
LC	OLS	2900-50-0006MR
FC	OPM	2900-52-0001MR
SC	OPM	2900-52-0002MR

DESCRIPTION	TEST PORT USAGE	AFL NO.
ST	OPM	2900-52-0003MR
LC	OPM	2900-52-0004MR
2.5 mm Universal	OPM	2900-52-0005MR
1.25 mm Universal	OPM	2900-52-0006MR
2.5 mm Universal	VFL	2900-50-0007MR
1.25 mm Universal	VFL	2900-50-0010MR

## **Test Management and Reporting Software**

DESCRIPTION	AFL NO.
TRM 3.0 upgrade from Basic to Advanced software TRM3-UGRADE	
TURBO App (Android Google play)	

#### **Recommended Products**



#### **Cloud-based Test Management and Reporting**

- Seamless interaction with Android™ applications
- Run reports at the push of a button

#### Qualifications

CATEGORY	REGULATION/STANDARD	QUALIFICATION
CE Marking	EU	Compliant to relevant EU Directives on health, safety, and environmental protection, and certified with CE marking
	IEC	Compliant to IEC 61010-1 for safety requirements for electrical equipment
	EN	Compliant to EN 61010-1 for safety requirements for electrical equipment
C ( .	IEC	Compliant to IEC 61326-1 for EMC requirements for electrical equipment
Safety /EMC	EN	Compliant to EN 61326-1 for EMC requirements for electrical equipment
/EMI	EN	Compliant to EN 55011 for EMC requirements for industrial, scientific and medical equipment
72	FCC	Compliant to code of federal regulations FCC 47 CFR 15 on unlicensed transmissions
	FDA	Compliant to code of federal regulations FDA 21 CFR 1040.10 and 1040.11 on laser products
	IEC	Compliant to IEC 60825-1 for safety of laser products
RoHS	EU	Compliant to EU regulations Directive 2011/65/EU (RoHS 2) and Directive 2015/863 (RoHS 3)
	TIA	Compliant to TIA-568.3-D for test and measurement requirements for premises optical fiber cabling and components
	IEC	Compliant to IEC 11801 for test and measurement requirements for optical fiber cabling for use within premises
	EN	Compliant to EN 50173 for test and measurement requirements for optical fiber cabling for use within premises
	AS/NZS	Compliant to AS/NZS 3080 for test and measurement requirements for optical fiber cabling for use within premises
Test Method	TIA	Compliant to TIA-526-7 for test procedures for installed optical fiber cable plant
rest ivietriou	TIA	Compliant to TIA-526-14 for test procedures for installed optical fiber cable plant
	IEC	Compliant to IEC 14763-3 for systems and methods for the inspection and testing of installed optical fiber cabling
	AS/NZS	Compliant to AS/NZS 14763.3 for systems and methods for the inspection and testing of installed optical fiber cabling
	IEC	Compliant to IEC 61280-4-1 for test procedures for installed optical fiber cable plant
	IEC	Compliant to IEC 61280-4-2 for test procedures for installed optical fiber cable plant

Contact Sales@AFLglobal.com to schedule a demonstration or learn how to buy.

Visit www.AFLglobal.com/Test to learn more about ROGUE OLTS Certifier.

International Sales and Service Contact Information available at www.AFLglobal.com/Test/Contacts