

ROGUE® OLTS Certifier

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



Features

- Bi-directional testing on up to 2 fibres 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-fibre MPO certification with optional Multi-fibre 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 fibre (LC, SC, FC, ST) and multi-fibre (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 fibres. The other two ports are a dedicated power meter and a visual fault identifier (VFI) to help troubleshoot networks.

ROGUE OLTS Certifier is available in two models: an intelligent base (iB1) model with an integrated display and compact base (cB1) model that requires a paired smart device. Both models, depending on the chosen configuration, can provide either single-fibre testing on quad SM/MM wavelengths (850/1300/1310/1550 nm) or single and dual-fibre testing at 1310/1550 nm.

ROGUE OLTS Certifier can also be connected to AFL's Multi-Fibre Switch (MFS) for certifying both 8- and 12-fibre MPO terminated cables bi-directionally to IEEE 40 and 100G test limits. An optional MFS add-on kit contains two Multi-Fibre Switches for either multimode or single-mode testing. The MFS communicates to ROGUE OLTS Certifier via a 30 cm test cord connected to the optical test port.

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.

The mobile App, TURBO, which is used on the paired smart devices required for cB1 models, is available for free download from Google Play.



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Specifications ^a

OLTS	MULTIMODE	SINGLE-MODE
Emitter Type	LED	Laser
Wavelengths	850 ±30 nm; 1300 ±20 nm	1310, 1550 ±20 nm
Safety Class	Class I FDA 21 CFR 1040.10 and 1040.11, IEC EN60825-1: 2007-03	
Detector Type	InGaAs	InGaAs
Launch Condition	Encircled Flux Compliant ^b	N/A
Length Measurement Range	5 km	200 km (SMF28e)
Power Measurement Range	+3 to -60 dBm	+3 to -60 dBm
Output Power	-24/-23 dBm, 62.5/50 µm	-3 dBm, 9 µm
Stability ^c	±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 fibre
Modes	CW and 2 Hz flashing

GENERAL	cB1	iB1
Size	23 x 11 x 7 cm (8.8 x 4.3 x 2.8 in)	23.5 x 13.3 x 7.6 cm (9.25 x 5.25 x 3.0 in)
Weight	1.3 kg (2.9 lb)	1.56 kg (3.46 lb)
Operating Temperature	-10 °C to +50 °C, 0 to 90 % RH (non-condensing)	-10 °C to +50 °C, 0 to 90 % RH (non-condensing)
Storage Temperature	-20 °C to +60 °C, 0 to 90 % RH (non-condensing)	-20 °C to +60 °C, 0 to 90 % RH (non-condensing)
Power	Rechargeable Li-Ion or AC power adapter	Rechargeable Li-Ion or AC power adapter
Battery Life	>8 hours continuous testing	>8 hours continuous testing

Notes:

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

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Ordering Information

Each ROGUE OLTS Certifier kit includes two (2) of each: ROGUE cB1 or 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)	PART NUMBER
ROGUE OLTS Certifier kit with cB1 Base, Quad SM/MM	ROGUE cB1 Base, Quad SM/MM Module, battery, AC charger, adjustable carry strap, carry case	RGK-CERT01
ROGUE OLTS Certifier kit with cB1 Base, Dual SM ports	ROGUE cB1 Base, Dual Ports SM Module, battery, AC charger, adjustable carry strap, carry case	RGK-CERT03
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	PART NUMBER
ROGUE OLTS with cB1 Base; contains ROGUE cB1 Base, Dual Ports SM Module, battery, AC charger, adjustable carry strap	RGK-OLTS03
ROGUE OLTS with iB1 Base; contains ROGUE iB1 Base, Dual Ports SM Module, battery, AC charger, adjustable carry strap	RGK-OLTS03B1
ROGUE cB1, Compact Base; contains ROGUE cB1 Base, battery, AC charger, adjustable carry strap	RG-C01
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 cB1 Base Kickstand	RGA-STND-01
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	8700-04-0007MR



ROGUE OLTS Certifier kit with iB1 Bases



ROGUE OLTS Certifier kit with cB1 Bases and required smart devices (optional purchase)

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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

Recommended Products



Multi-Fibre Switch

- Converts a single port module into a multi-fibre MPO tester
- Dual wavelength, single-mode or multimode
- 12F MPO port for connection to MPO cable under test



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
Safety/EMC/EMI	IEC	Compliant to IEC 61010-1 for safety requirements for electrical equipment
	EN	Compliant to EN 61010-1 for safety requirements for electrical equipment
	IEC	Compliant to IEC 61325-1 for EMC requirements for electrical equipment
	EN	Compliant to EN 61325-1 for EMC requirements for electrical equipment
	EN	Compliant to EN 55011 for EMC requirements for industrial, scientific and medical equipment
	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 on RoHS 2
	EU	Compliant to EU regulations Directive 2015/863 on RoHS 3
Test Method	TIA	Compliant to TIA-568.3-D for test and measurement requirements for premises optical fibre cabling and components
	IEC	Compliant to IEC 11801 for test and measurement requirements for optical fibre cabling for use within premises
	EN	Compliant to EN 50173 for test and measurement requirements for optical fibre cabling for use within premises
	AS/NZS	Compliant to AS/NZS 3080 for test and measurement requirements for optical fibre cabling for use within premises
	TIA	Compliant to TIA-526-7 for test procedures for installed optical fibre cable plant
	TIA	Compliant to TIA-526-14 for test procedures for installed optical fibre cable plant
	IEC	Compliant to IEC 14763-3 for systems and methods for the inspection and testing of installed optical fibre cabling
	AS/NZS	Compliant to AS/NZS 14763.3 for systems and methods for the inspection and testing of installed optical fibre cabling
	IEC	Compliant to IEC 61280-4-1 for test procedures for installed optical fibre cable plant
	IEC	Compliant to IEC 61280-4-2 for test procedures for installed optical fibre cable plant

Contact AUSSales@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