Fiber OneShot™ Optical Test Set

Introducing the new innovative, pocket-size Fiber OneShot Optical Test Set. Bringing you a simple test set for traditionally complex single-mode fiber testing. Designed with an intuitive one button test capability, you are testing in just a few seconds. Quickly and accurately verify if a fiber is active, find the distance to a break or end, dirty end face or reflective event. This test set goes from zero to 9,999 feet, with no dead zone. For testing at the central office, node, hub, drop, optical network terminal (ONT); for residence or business, the Fiber OneShot is the portable FTTx tester for you.

Fast testing for essential fiber troubleshooting

Triple-Check for essential troubleshooting:

1. Light or No light – is my fiber active? CheckActive alert
2. Distance to event **(fault)**: Dirty end face/ bulkhead and break or reflective event
3. Distance to event **(end)**: End of fiber

Durability for the outside plant environment

Built to last, the Fiber OneShot incorporates an energy-absorbing holster over an impact-resistant case to withstand drops, impacts, and the tough outside plant environment. Together with a heavy-duty tethered end cap to protect the fiber adapter, the Fiber OneShot is the test set for demanding field applications, ensuring trouble-free operation.

Testing benefits that increase your productivity:

- Measure the length to a break, end, dirty end face/bulkhead, or reflective event quickly and accurately from 0 – 9,999 feet (note* 0 – 6,000 meters displayed in metric mode)
- New CheckActive™ feature: alerts the user if an optical signal is on the fiber
- Instant-on: no boot/load time
- Single button testing: essential fiber testing in just a few seconds
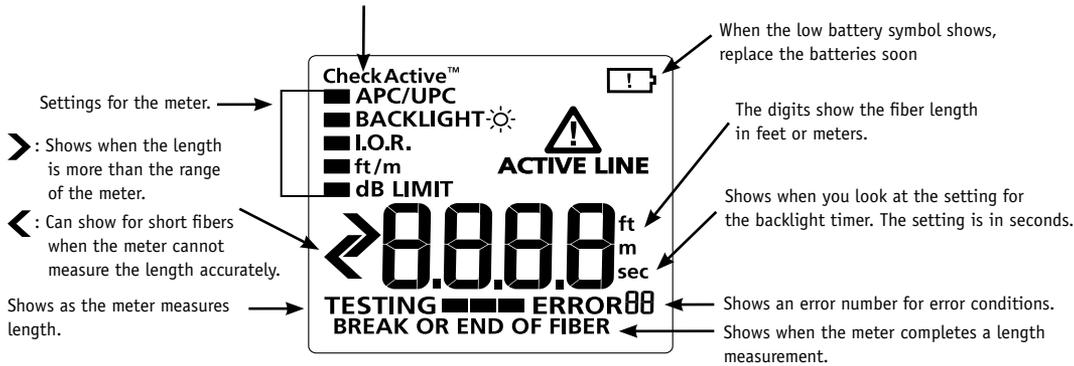- No dead zone: locate fiber faults at 1-meter

Top features include:

- Essential fiber test results displayed numerically, no interpretation needed
- Extra large liquid crystal display (LCD) with programmable backlight for use in any environment
- Auto shut down to extend battery life
- Battery life gauge
- Extended battery life, up to 5,000 tests
- Field-replaceable (2) AA batteries
- Quick change battery compartment, no screwdriver needed
- Removable/cleanable SC adapter
- Self calibrating, factory calibration not required
- Adjustable feet/metric mode
- Adjustable APC/UPC mode
- Adjustable index of refraction (I.O.R.) mode
- Adjustable dB limit mode
- Output wavelengths 1310 nm ± 25 nm
- Durable to survive drops, vibrations and impacts

Ordering information:

Models	
Model number	**Description**
FIBR-1-KIT	FIBER ONE SHOT-SC-KIT
FIBR-1-SHOT	FIBER ONE SHOT-ONLY
FIBR-1-KIT-VF	FIBER ONE SHOT-SC-KIT + VISIFAULT
FIBR-1-KIT-PM	FIBER ONE SHOT-SC-KIT + SFPOWERMETER
FIBR-1-KIT-VFPM	FIBER ONE SHOT-SC-KIT+ VISIFAULT + SFPOWERMETER
Accessories	
Model number	**Description**
FIBR-AC-UAPC	1-METR UPC-APC LAUNCH CRD
FIBR-AC-UUPC	1-METR UPC-UPC LAUNCH CRD
FIBR-AC-CH	CASE, HOLSTR-FIBR ONESHOT

Essential single-mode fiber testing made easy

Technical Data

Display: Fiber test results displayed numerically, no interpretation necessary

CheckActive™ shows when the meter looks for an optical signal on the fiber. CheckActive™ and ACTIVE LINE blink if there is an optical signal on the fiber. The meter will not do a test if there is an optical signal on the fiber.

Settings for the meter.

> : Shows when the length is more than the range of the meter.

< : Can show for short fibers when the meter cannot measure the length accurately.

Shows as the meter measures length.

CheckActive™
■ APC/UPC
■ BACKLIGHT ☀
■ I.O.R.
■ ft/m
■ dB LIMIT

ACTIVE LINE

8.8.8.8 ft m sec

TESTING ■■■ ERROR 88
BREAK OR END OF FIBER

When the low battery symbol shows, replace the batteries soon

The digits show the fiber length in feet or meters.

Shows when you look at the setting for the backlight timer. The setting is in seconds.

Shows an error number for error conditions.

Shows when the meter completes a length measurement.

Fiber OneShot Optical Test Set Specifications (Typical)

Operating temperature with the battery	0ºC to 50ºC	**Safety**	CSA C22.2 No. 61010.1:04, EN 61010-1 2nd Edition 2001, EN60825-1, 2:2006
Non-operating temperature	-20ºC to 60ºC	**Altitude**	3000 m
Operating relative humidity (without condensation)	95% (10ºC to 35ºC) 75% (35ºC to 40ºC) uncontrolled < 10ºC	**EMC**	EN 61326-1: 2004
Vibration	Random, 5 Hz to 500 Hz, MIL-PRF-28800F CLASS 2	**Sampling spacing**	12.5 cm to 1 m (1.25 ns to 10 ns)
Shock	1 meter drop test	**Instrument reporting information**	Distance to the first reflective incident and/or end of fiber2
UPC or APC open Break Reflective incident Poor bulkhead connection	BREAK OR END OF FIBER BREAK OR END OF FIBER 0 ft/m (Will not measure a splice loss, connector loss, bend loss, or fiber attenuation.)	**Maximum distance**	6000 meters or 9999 feet
LCD type	Backlit black and white (segments)	**Distance accuracy (0 m to 3000 m or 0 ft to 9999 ft)**	± 1 m for reflective incidents, ± 0.1% of length6 ± 3 m for non-reflective incidents, ± 0.1% of length7
Index of refraction range	1.45 to 1.5 (factory default is 1.468)	**Testing speed**	< 6 seconds typical8
Auto turn off	Automatically turns off after 5 minutes if no keys are pressed.	**Connector**	Removable/cleanable SC adapter, UPC polish
Factory calibration interval	None	**Fiber types tested**	9/125 µm singlemode
Output wavelengths	1310 nm ± 25 nm	**Reflectance threshold**	-40 dB typical
Emitter type	Fabry-Perot laser diode connected to 9/125 µm fiber	**APC open detection**	-65 dB reflectance typical and backscatter > 3 dB above the noise floor
Laser classification	Class 1 CDRH Complies to EN 60825-2	**Detector type**	InGaAs PIN photodiode used in incident detection
Pulse widths	20 ns to 500 ns	**Safety**	CSA C22.2 No. 61010.1.04, EN 61010-1:2001 {2nd Edition}, EN60825-1:2007 Class 1 Laser
Power into fiber under test	> 10 mW-pk	**EMC**	EN 61326-1, EN61000-4-2, 3 80 MHz to 2.7 GHz @ 3V/m. Telephony Requirements: Class B Emissions
Dynamic range	> 11 dB	**CE**	Conforms to relevant European Union directives
Distance to first reflective open	1 m	**N10140**	Conforms to relevant Australian standards
Photodiode	40 µm – 80 µm, PIN InGaAs	**CSA**	Listed by the Canadian Standards Association CSA C22.2 No. 61010.1.04

Single-mode fiber testing made easy anywhere in your network

Measure the length on a spool

Test at the optical network terminal (ONT or hub)

Test buried or aerial drops