



TREND NETWORKS



FiberMASTER OTDR



Product Launch Plan

Size, Simplicity & Value without Compromise

Depend On Us



One of the world's smallest OTDRs with performance verified by GHMT (German testing laboratory) at an incredible price.

Available in a full range of models, with accessories to build a complete fibre optic testing solution.





4. FiberMASTER Product Tour



- ✓ Quad OTDR
- ✓ PON OTDR
- ✓ Quad Light Source*



- ✓ Multimode OTDR
- ✓ Single-mode OTDR



- ✓ Power Meter

* Quad light source does not include power meter port





Quad/PON OTDR & Quad Light Source



Quad: MM OTDR/light source
PON: 1625 nm OTDR/light source

Quad: SM OTDR/light source
PON: 1310/1550 nm OTDR/light source

Power Meter
850-1625 nm

Video inspection
port

USB charge / data
transfer port





Visual Fault Locator

MM OTDR/light source
SM OTDR/light source

Power Meter
850-1625 nm

Video inspection
port

USB charge / data
transfer port





Visual Fault Locator

Power Meter
850-1625 nm

Video inspection
port

USB charge / data
transfer port





Kits include:

- Hard carry case (except for PM & LS)
- SC-SC & SC-LC jumpers
 - MM/SM depending on product
- 2.5/1.25mm cleaning pens
- LC/SC/ST/FC/2.5mm/1.25mm power meter adapters
- 2 x stylus
- Universal power adapter
- USB cable

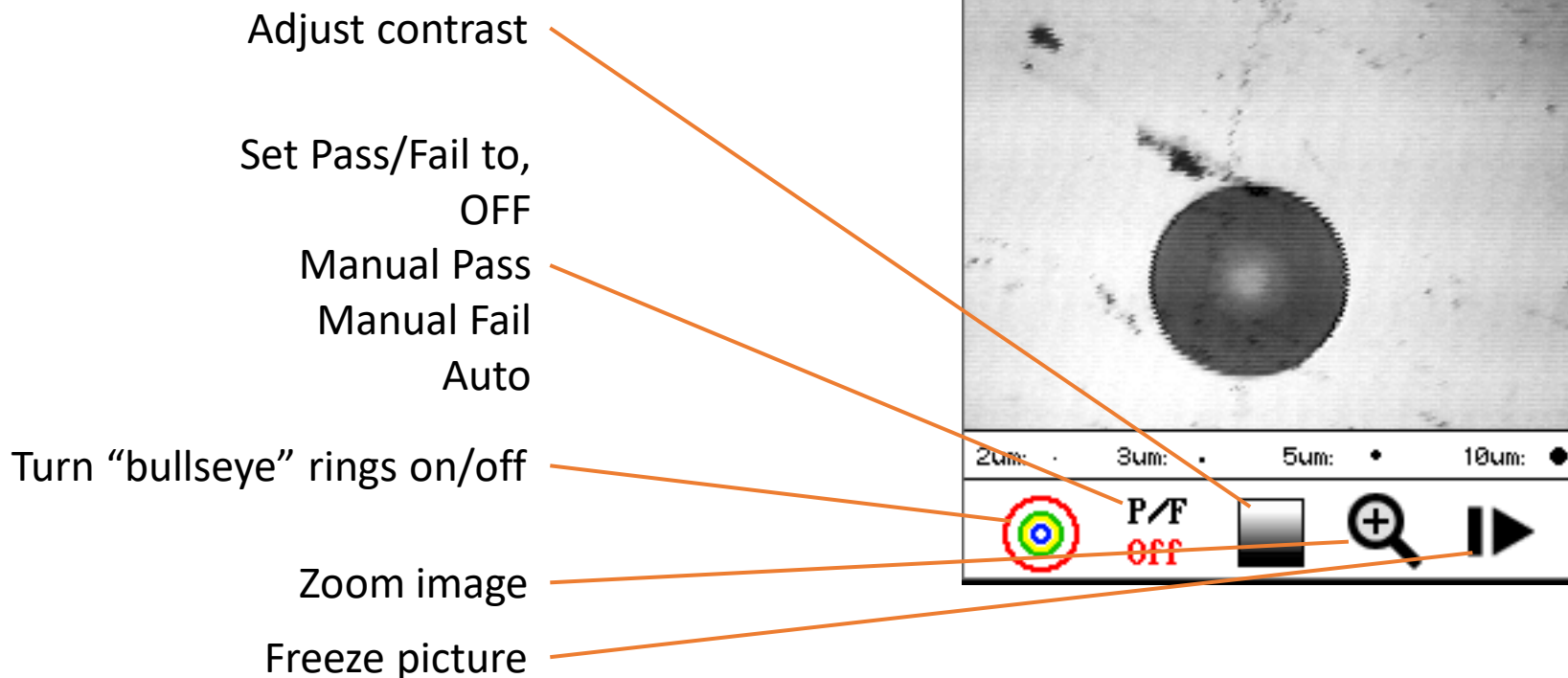


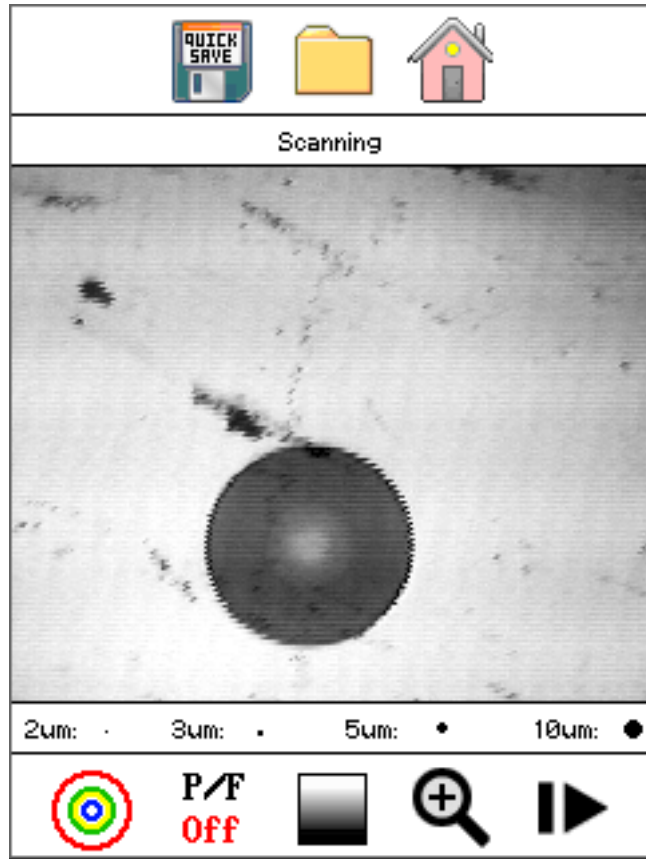


- Video Inspection Probe
- 240x magnification
- Manual focus
- Auto image centering on tester
- Auto Pass/Fail inspection to IEC 61300-3-30
- Comes with 2.5mm and 1.25mm connector tips
- Tips for panel/bulkhead inspection available separately

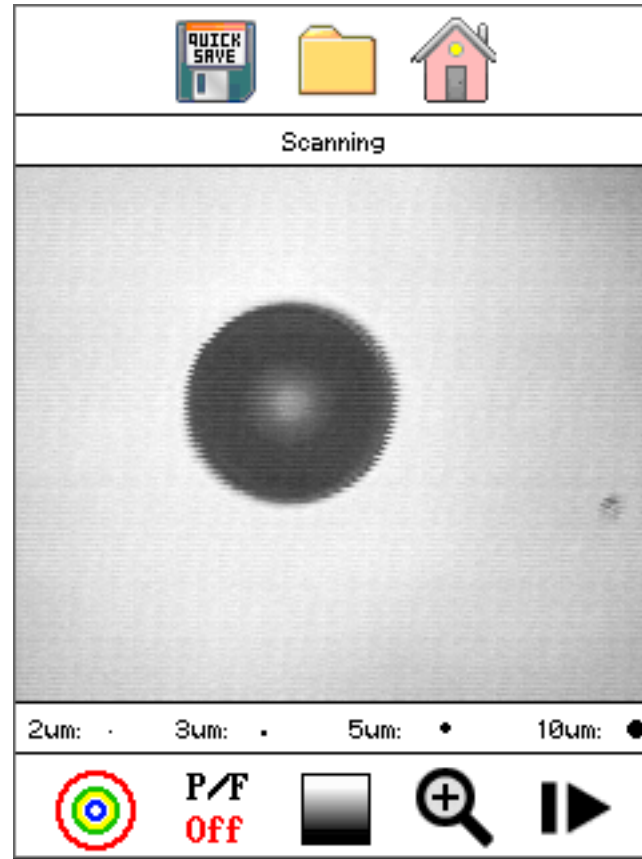


- All models, including power meter and light source accept the R240-VIP inspection probe.

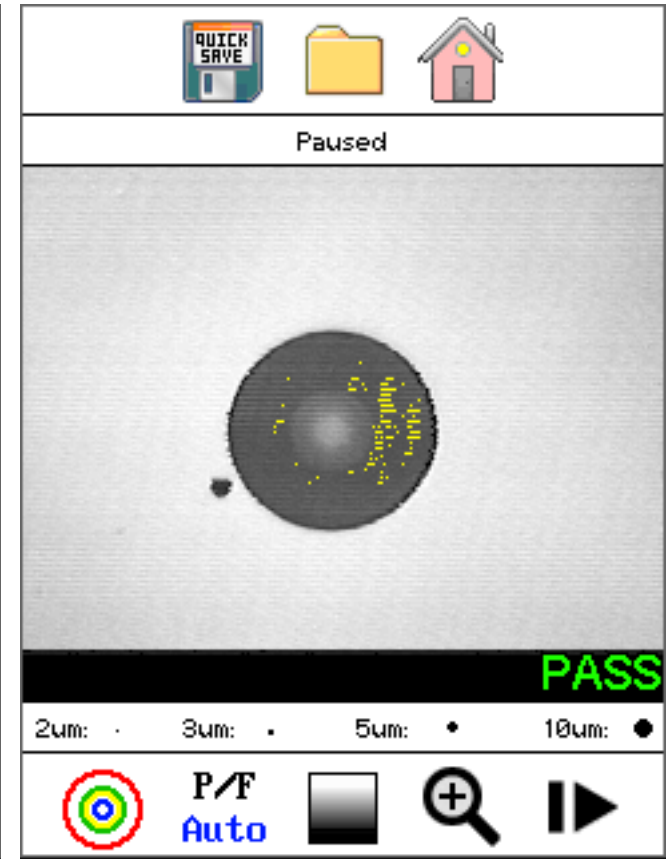




Dirty connector



Clean connector
P/F Off



Clean connector
P/F Auto



- R240-QIP
 - Quad OTDR: 850 / 1300 / 1310 / 1550 nm
 - Inspection port
 - Power Meter: 850 – 1625 nm
- R240-MIPV
 - Multimode OTDR: 850 / 1300 nm
 - Inspection port
 - Power Meter: 850 – 1625 nm
 - Visual Fault Locator
- R240-SIPV
 - Single-mode OTDR: 1310 / 1550 nm
 - Inspection port
 - Power Meter: 850 – 1625 nm
 - Visual Fault Locator
- R240-PIP
 - PON OTDR 1310 / 1550 / 1625nm
 - Inspection port
 - Power Meter: 850 – 1625 nm
- R240-PMIV
 - Power Meter: 850 – 1625 nm
 - Inspection Port
 - Visual Fault Locator
- R240-LSIV
 - Light Source: 850 / 1300 / 1310 / 1550 nm
 - Inspection port
 - Visual Fault Locator
- R240-PMLS
 - R240-PMIV + R240-LSIV
- R240-VIP
 - Video Inspection Probe



LAN / Enterprise

- Office space
- Government
- Education
- Transportation
- Retail

WAN

- Internet Service Providers
- Cable TV providers
- Mobile telecom providers
- Local government
 - CCTV/traffic control
- State government
 - highway management

Other

- Industrial networks/plants
- Military
- Marine



Installers/Contractors

- Cabling contractors
- Electrical/low voltage contractors
- Cellular infrastructure installers

End Users

- Enterprise network owners
- Telecom network operators
- Utility companies with own telecom
- Rail operators with cabling on right of way
- Transportation (airport) operators

Other

- Shipbuilders
- Cable assembly houses



Physical

- Small size, one of the smallest OTDRs on the market
- Instant turn-on time
- Long battery life and can charge from a USB power bank
- Protected connectors
- Family design, carries TREND branding forward

Performance

- High dynamic range
- Good dead zones
- Excellent performance for short (1 min) test times
- Excellent distance accuracy (GHMT verified)
- Trace, schematic, and event map views included free (no Exfo licenses)

Other

- Easy to use for enterprise customers
- Low cost!
- Automatic/manual setup & operation
- Power meter on every model
- PON model for 1:32 and 1:64 splitters
- Includes hard carry case
- Free PC software – no licenses
- Files in standard Bellcore format for universal use



Specification	FiberMASTER	Fluke Optifiber Pro	OTDR II/Exfo Max 720	AFL Flexscan FS-300
Attenuation dead zone	5m MM/SM	2.5m MM / 3.6m SM	2.5m MM / 3.5m SM	3m MM / 3.5mm SM
Event dead zone	1m MM/SM	0.5m MM/0.6m SM	0.5m MM / 0.7 SM	0.8m MM / 0.8m SM
Dynamic ranges 850/1300/1310/1550	26/27/38/37	28/30/32/30	27/29/36/35	27/29/37/36
Approx. Distance (Fibre only, no connections/splices)	8.7km @ 850nm 27km @ 1300nm 38km @ 1310nm 185km @ 1550nm	9.3km @ 850nm 30km @ 1300nm 38km @ 1310nm 150km @ 1550nm	9km @ 850nm 29km @ 1300nm 36km @ 1310nm 175km @ 1550nm	9km @ 850nm 29km @ 1300nm 37km @ 1310nm 180km @ 1550nm
Sampling points	Up to 64,000*	Up to 64,000	Up to 256,000	Up to 300,000
Min Resolution	12.5cm / 5in*	3cm / 1.18in	4cm / 1.57in	5cm / 1.97in
Quad List Price USD	\$3,995	\$11,437	\$10,725	\$7,995
Quad List Price GBP	£2,895	£9,611	£8,850	£5,517
Quad List Price Euro	€3,395	€9,240	€10,090	€6,718

* Software update in progress to increase to 128,000 points, reducing resolution to 5cm/1.97"



R240-ML-SCSC: 150m multimode SC/UPC-SC/UPC

R240-ML-SCLC: 150m multimode SC/UPC-LC/UPC

R240-SL-SCSC: 150m single-mode SC/UPC-SC/UPC

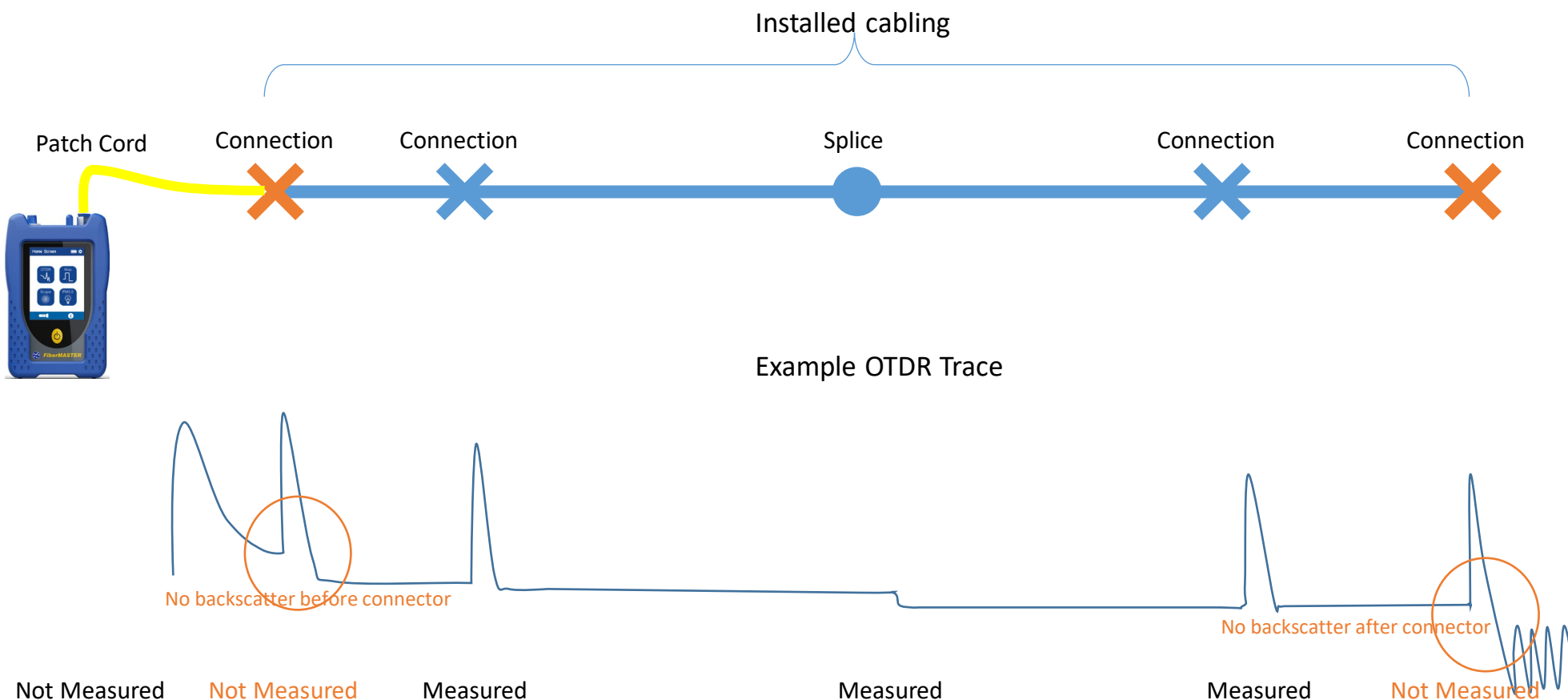
R240-SL-SCLC: 150m single-mode SC/UPC-LC/UPC

R240-SL-SCSC-A: 150 single-mode SC/APC-SC/APC



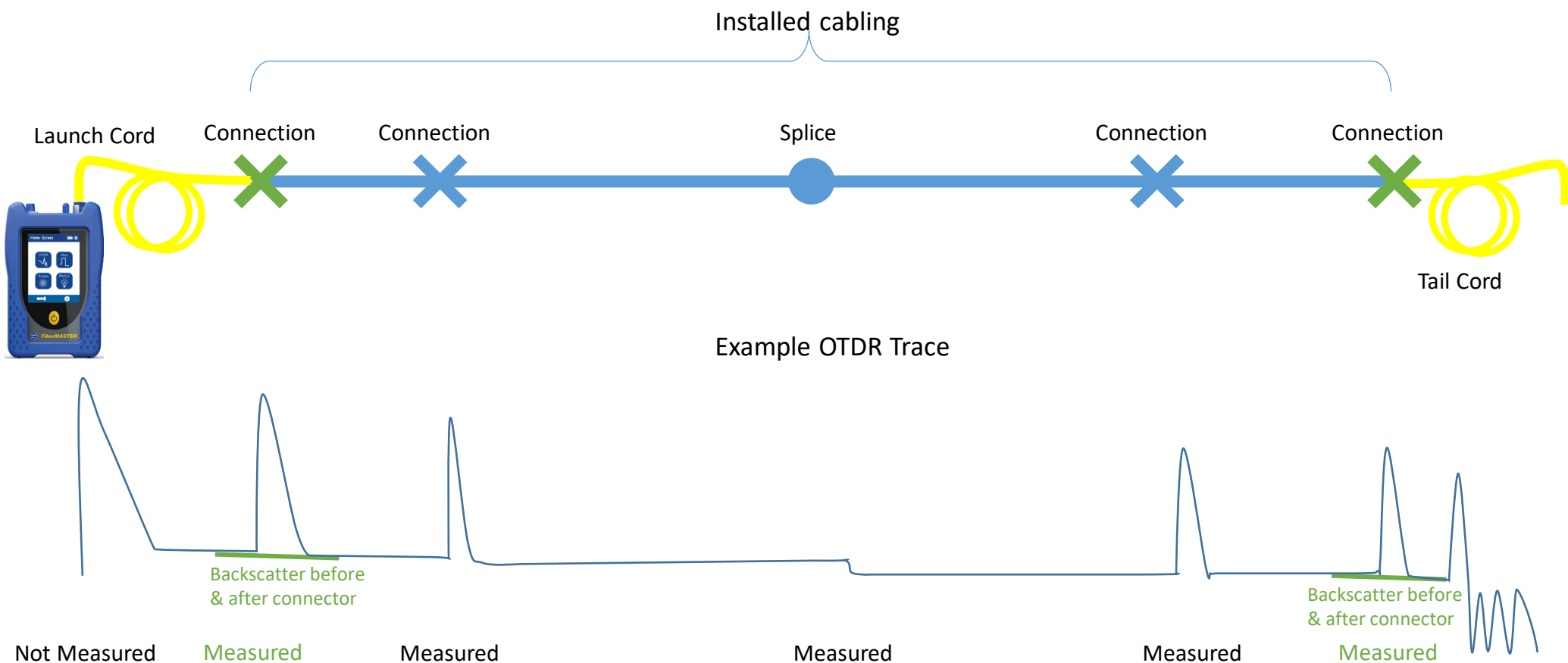


- Why use launch and tail cords?
 - To measure the loss of the first and last connections of a system
 - Without them, the first/last connector condition is unknown





- When launch/tail cords are used the complete installed cabling system can be qualified.





FIBERMASTER

SIZE, SIMPLICITY AND VALUE
WITHOUT COMPROMISE

OTDR, PON OTDR, Power Meter, Light Source,
Video Inspection Probe and Visual Fault Locator



 TREND NETWORKS

Depend On Us



FiberMASTER

Why do I need a FiberMASTER?

It depends how important speed and accuracy are to you.

FiberMASTER - size, simplicity and value without compromise, made in the USA, tested in Germany.

The new FiberMASTER series of fibre optic testers will make it easier and faster to verify, troubleshoot and certify fibre optic cabling.

The OTDR, PON OTDR, Power Meter and Light Source, and Inspection Probe will enable cable installers to get the dependable test results needed, whilst saving thousands of pounds.

As one of the smallest OTDRs in the World you will find them easier to carry and operate whilst the ruggedised housing will protect your investment.

The simplified setup options makes them easy to use, saving you time on training and reducing the likelihood of errors.

Our New York Research and Development centre of excellence has over 30 years experience designing OTDRs providing you with the most advanced, compact optical test systems available.



2 www.trend-networks.com



FiberMASTER



Accuracy verified by test lab, GHMT

Distance accuracy verified by German test laboratory, GHMT AG in accordance with the Telcordia GR-196 specifications.



Industry leading Dynamic Range

Test longer fibers, PON systems and maintain accuracy on high-loss fibers



Save \$1,000s on testing

Save more than 50% vs other premium brands. As a global brand, our efficiencies in production, vast experience, and economies of scale enable us to keep costs low.



Built to last

It's a real inconvenience when testers must be repaired, that's why we've surrounded it with a thick rubber housing. Protecting your investment and reducing downtime.



Start testing faster

The FiberMASTER is ready to start testing as soon as you are. There is no boot up time or delay. Simply turn on and start testing.



Minimal training time

The touchscreen user interface will guide you through the setup and testing process to reduce potential mistakes as well as saving time in training field technicians.



Protective "hard" carry case

Whilst other high cost testers provide only a semi-rigid or soft carry case we understand that you depend on your tester every day so we provide a high quality rigid case to keep it as good as new.



Experts in fiber technology

We have over 30 years' experience in developing fiber optic testers and OTDRs at our R&D fiber centre of excellence in Oriskany, New York.



Made in the USA

We are proud to develop and manufacture our testers in the USA.

Test, Troubleshoot and Certify cabling faster with the FiberMASTER OTDR



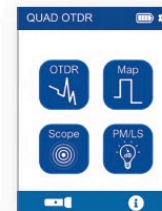
The FiberMASTER OTDR is available in 4 options, Quad, multimode, single-mode and PON.

The OTDRs feature both high dynamic range and small dead zones providing the precision required for installation and troubleshooting alike. The software simplifies certification of cabling to meet TIA/ISO/IEC/IEEE requirements

with simple pass/fail results. Additionally custom test parameters are easily set to accommodate any application.

OTDRs can be complicated to configure and achieve accurate results. FiberMASTER automates testing and steps you through the process as shown below.

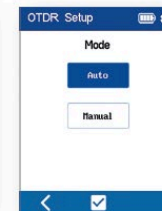
For FTTx/FTTH applications the PON OTDR identifies split ratios for easy testing and troubleshooting of inactive and active networks. The 1625nm wavelength allows in-service testing of networks without interrupting existing subscribers.



Home screen



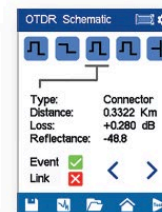
Select the wavelength(s)



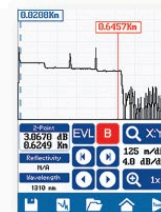
Select mode



Select the application



Events and event type shown with clear pass/fail result for each



OTDR trace shown for detailed analysis

All FiberMASTER OTDRs support the Fiber Inspection Probe





Instant results using the FiberMASTER Power Meter (PM) and Light Source (LS)

The power meter / light source is used to measure attenuation in multimode or single-mode cabling.

The power meter's high dynamic range also allows troubleshooting of LAN and Telecom networks. Both the power meter and light source support the fiber inspection probe to capture images of the connector on each end of the cabling.

All OTDRs include a power meter and when partnered with a FiberMASTER light source, the OTDR can be used to directly measure cable attenuation or to measure the output power of optical equipment for troubleshooting.

Key Features

- ORL measurement range to -60 dB
- 82 dB power meter dynamic range
- Compatible with the auto-centring/Pass/Fail video probe
- Auto test up to three wavelengths
- Auto wavelength switching
- Universal power meter and light source adapters
- Storage up to 40,000 tests
- Bright colour display
- Rechargeable lithium battery
- USB interface
- CertSoft free reporting software
- On-board help feature
- Pass/Fail to IEC61300-3-35 Standard
- 150x and 300x zoom level
- Automatic image positioning
- Stores images in FiberMASTER testers
- Attach images to OTDR / Power Meter test report
- Wide range of connector adapters available
- One hand operation

Fiber Inspection Probe with Automatic Certification to IEC61300-3-35 Standard

90% of all fiber optic cable and network issues arise from dirty and/or damaged fiber connectors which is why the Fiber Inspection Probe is an essential piece of equipment for any fiber cable installer or technician.

Managing Test Data and Documentation is easy with CertSoft Reporting Software

Project reporting and documentation is fast and easy with the free CertSoft PC reporting software. Reports can include trace graphs, schematic and table analysis, power meter results and connector images.



TREND NETWORKS		Pass
Connector Image		
Trace Parameters		Pass/Fail Parameters
Results Overview		Event Table

Specifications

OTDR	
Wavelength	850, 1300, 1310, 1550, 1625 nm
Dynamic Range (dB)	29/30 MM, 38/37 SM, 37/37/36 PON
Dead Zones	1m Event, 8m Attenuation
Resolution	6 cm - 16 m / 2 in - 62 ft
Distance Uncertainty	±(0.75m + 0.008% x distance + sampling res.) verified by OHMT [®] laboratories
Sampling Points	Up to 128,000
Storage	Approx. 40,000 results
Size/Weight	170 mm (6.7 in) 108 mm (4.2 in) x 81 mm (2.0 in) 730 g (1.6 lbs)
Connector	SC included, FC, ST optional

Power Meter	
Wavelength	850, 1300, 1310, 1490, 1550, 1625 nm
Measurement Range	+5 to -77 dBm
Uncertainty	± 0.18 dB reference conditions ± 0.25 dB from 0 to -65 dBm ± 0.35 dB from 0 to +5 dBm ± 0.35 dB -65 to -77 dBm
Resolution	0.01 dB
Connectors	LC/SC/FC/ST/2.5mm/1.25mm included



Sapphire CARE PLAN

Complete protection for your FiberMASTER

The Sapphire Care Plan is designed to help minimize down time, reduce the cost of ownership and protect against unforeseen repair bills.

- Free Annual Calibration
- Free Repairs
- Free Loan Unit During Repairs and Calibration
- Free Online Training and Technical Support
- Free Shipping
- Free Replaceable Wear Parts

Every year choose two of the following accessories:

- R240-ML-SCSC - Launch cable OM4 150m SC-SC
- R240-ML-SCLC - Launch cable OM4 150m SC-LC
- R240-SL-SCLC - Launch cable SM G.657 A1 150m SC-LC
- R240-SL-SCSC - Launch cable SM G.657 A1 150m SC-SC
- R240-SL-SCSC-A - Launch cable SM G.657 A1 150m SC-SC APC
- 33-963-10 - One-click fiber cleaner STC-TC 2.5mm
- 33-963-11 - One-click fiber cleaner STC-FC 1.25mm



FiberMASTER

Product Size
Height = 6.7"
Width = 4.25"
Depth = 2"



Depend On Us

7

FiberMASTER

Size, simplicity and value without compromise

Ordering Information / Kit Contents

Part No	Description	Hard carry case	MM 2m Cable LC-SC	MM 2m Cable SC-SC	SM 2m Cable LC-SC	SM 2m Cable SC-SC	SM 2m APC Cable SC-SC	1.25mm cleaning pen	2.5mm cleaning pen	Power Adapter	USB Cable	Stylus
R240-QIP	FiberMASTER Quad OTDR (850/1300/1310/1550) with SC connectors, Inspection port, Power meter	1	1	1	1	1		1	1	1	1	2
R240-MIPV	FiberMASTER Multimode OTDR (850/1300) with SC connector, Inspection port, Power meter	1	1	1				1	1	1	1	2
R240-SIPV	FiberMASTER Single-mode OTDR (1310/1550) with SC connector, Inspection port, Power meter	1			1	1		1	1	1	1	2
R240-PIP	FiberMASTER PON OTDR (1310/1550/1625) with SC-APC connectors, Inspection port, Power meter	1					1		1	1	1	2
R240-LSIV	FiberMASTER Quad light source with LC connectors, Inspection port, VFL		1	1	1	1		1	1	1	1	2
R240-PMIV	FiberMASTER Multimode/single-mode power meter with interchangeable SC/SC/F-C connectors, Inspection port, VFL		1	1	1	1		1	1	1	1	2
R240-PMLS	FiberMASTER Multimode/single-mode power meter and quad light source kit, with Inspection port, VFL	1	2	2	2	2		2	2	2	2	4

Sapphire Care Plan and Extended Warranty

Part No.	Description
SCP1YFM-Q	Sapphire Care Plan - FiberMASTER Quad and PON OTDR - 1 Year
SCP2YFM-Q	Sapphire Care Plan - FiberMASTER Quad and PON OTDR - 2 Year
SCP3YFM-Q	Sapphire Care Plan - FiberMASTER Quad and PON OTDR - 3 Year
SCP1YFM-P	Sapphire Care Plan - FiberMASTER SM or MM OTDR or PM/LS Kit - 1 Year
SCP2YFM-P	Sapphire Care Plan - FiberMASTER SM or MM OTDR or PM/LS Kit - 2 Year
SCP3YFM-P	Sapphire Care Plan - FiberMASTER SM or MM OTDR or PM/LS Kit - 3 Year
R240-QIP-W2	2 Year Warranty - FiberMASTER OTDR Quad
R240-MIPV-W2	2 Year Warranty - FiberMASTER OTDR Multimode
R240-SIPV-W2	2 Year Warranty - FiberMASTER OTDR Single-mode
R240-PIP-W2	2 Year Warranty - FiberMASTER OTDR PON
R240-LSIV-W2	2 Year Warranty - FiberMASTER Light Source Quad
R240-PMIV-W2	2 Year Warranty - FiberMASTER Power Meter MM/SM
R240-PMLS-W2	2 Year Warranty - FiberMASTER Power Meter and Light Source
R240-VIP-W2	2 Year Warranty - FiberMASTER Fiber Inspection Probe

Optional Accessories

Part No.	Description
R240-VIP	FiberMASTER video inspection probe, with auto-centring and zoom feature, compatible with OTDR, light source and power meter
R240-ML-SCSC	Launch cable, OM3, 150m, SC-SC
R240-ML-SCLC	Launch cable, OM3, 150m, SC-LC
R240-SL-SCLC	Launch cable, SM G.657 A1, 150m, SC-LC
R240-SL-SCSC	Launch cable, SM G.657 A1, 150m, SC-SC
R240-SL-SCSC-A	Launch cable, SM G.657 A1, 150m, SC-SC APC
R164050	FT III/IV-Encoiled Flux 50/125um Cable SC - SC
R164051	FT III/IV-Encoiled Flux 50/125um Cable SC - LC
R240-VIP-SC	SC bulkhead video adapter tip
R240-VIP-LC	LC bulkhead video adapter tip
R240-VIP-SCA	SC/APC bulkhead video adapter tip
R240-VIP-FCA	FC/APC bulkhead video adapter tip
R240-VIP-125U	1.25mm universal bulkhead video adapter tip
R240-VIP-250U	2.5mm universal bulkhead video adapter tip



TREND NETWORKS

TREND NETWORKS
300 Roundhill Drive, Suite 1,
Rockaway, NJ 07866, USA
Tel. 973-957-7700
contactus@trend-networks.com

www.trend-networks.com

TREND Networks and FiberMASTER are registered trademarks of TREND Networks.



Specification subject to change without notice. E&OE
© TREND NETWORKS LIMITED 2021
Publication no.: 240801 Rev1



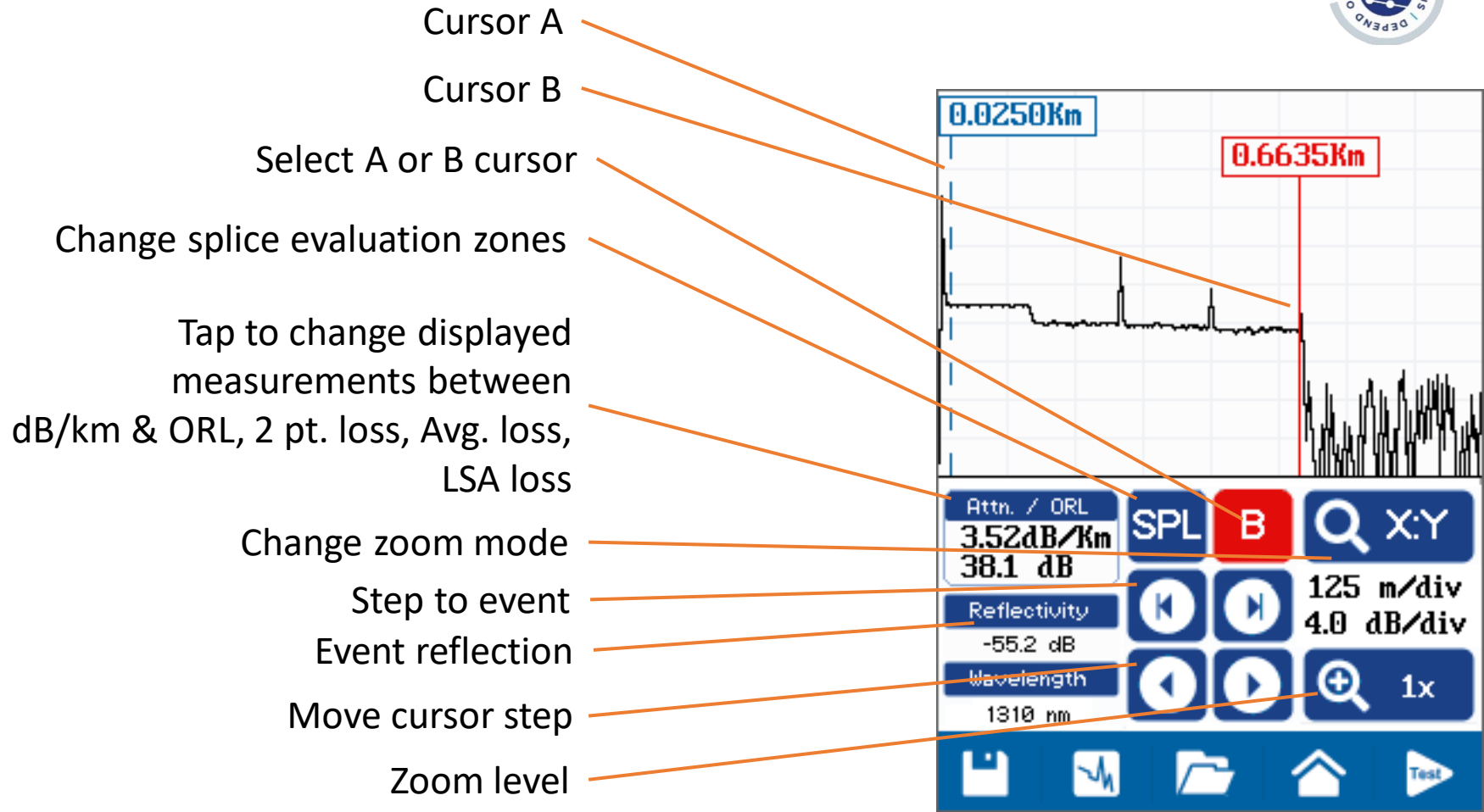
- Sapphire: 1-3 years and includes,
 - Extended warranty
 - Loaner tester
 - Free two-way shipping
 - Annual calibration
 - Annual consumables (cleaning pens or launch cords)
 - Virtual training
- Extended Warranty: 2 years
 - Extended warranty only

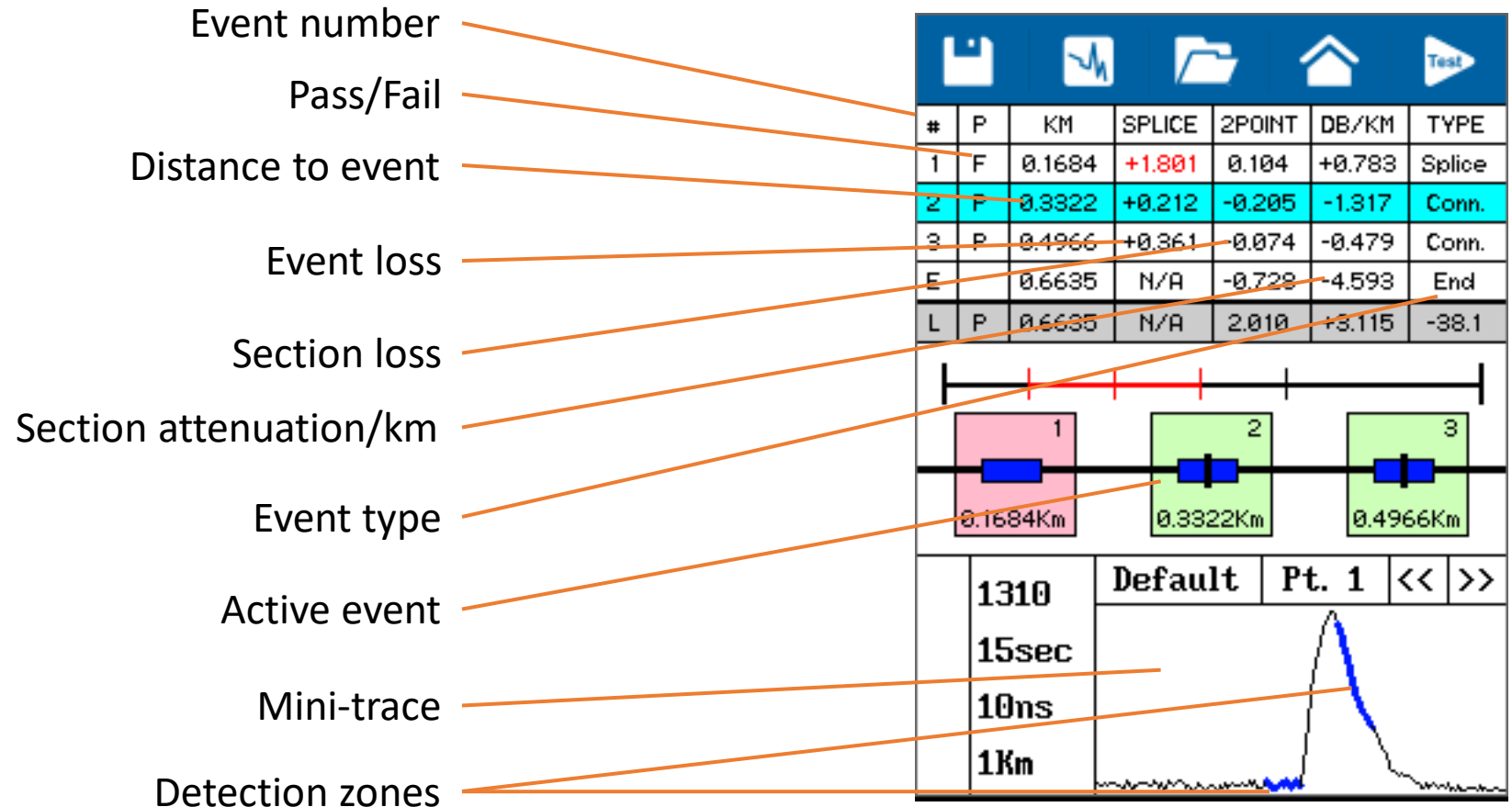


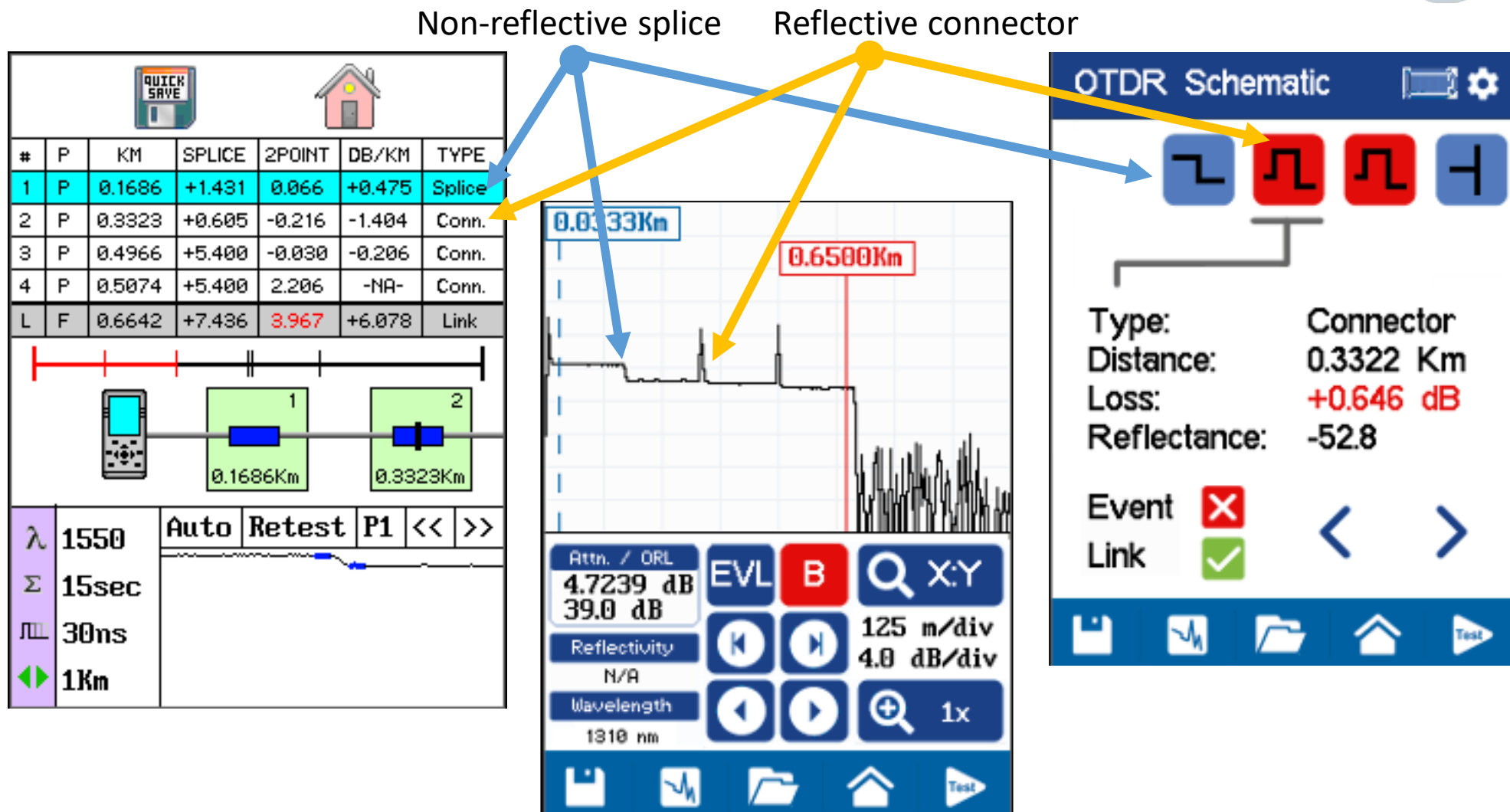
1 Year

2 Years

3 Years







Power Meter / Light Source Testing

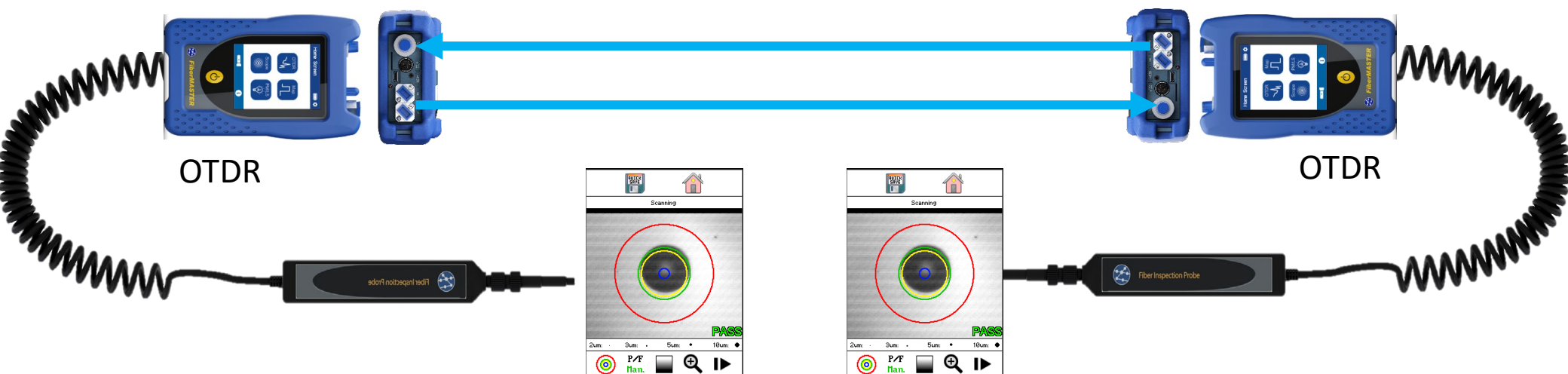


- Power Meter / Light Source
- dB loss of one Fibre in a single direction
 - Using an OTDR and a Light source
- dB loss at two wavelengths, stored as two different tests
 - Power meter auto-detects wavelength of power meter, but can only take one measurement at a time
- Length cannot be measured with the PM/LS
- Connector inspection at both ends
- 1-Jumper reference supported for LC/SC/FC/ST connections





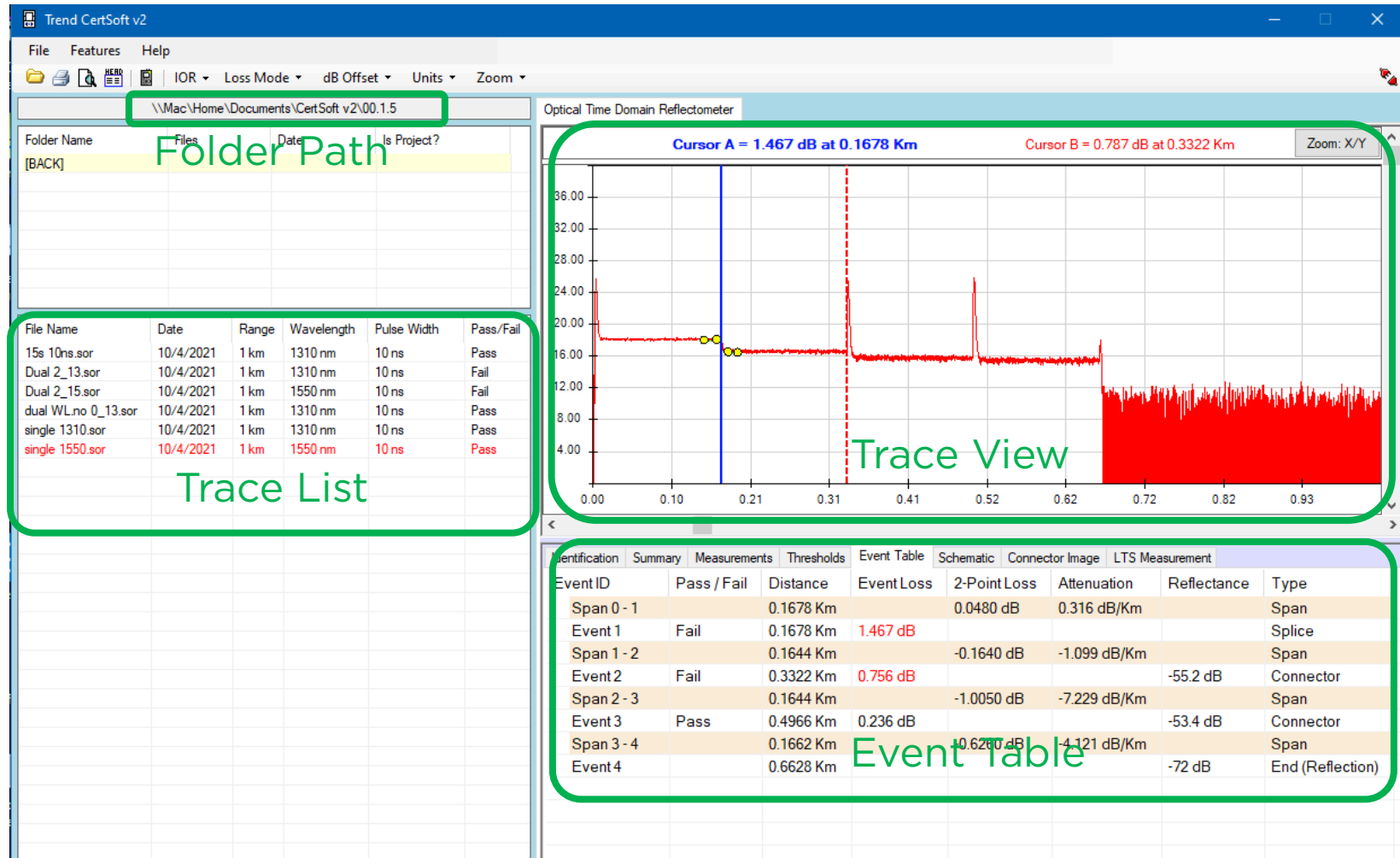
- Power Meter / Light Source
- dB loss of two Fibers in a single direction
 - Using two OTDRs
- dB loss at two wavelengths, stored as two different tests
 - Power meter auto-detects wavelength of power meter, but can only take one measurement at a time
- Length cannot be measured with the PM/LS
- Connector inspection at both ends
- 1-Jumper reference supported for LC/SC/FC/ST connections





- Power Meter / Light Source
- dB loss of one Fibre in a single direction
 - Using one OTDR
- dB loss at two wavelengths, stored as two different tests
 - Power meter auto-detects wavelength of power meter, but can only take one measurement at a time
- Length cannot be measured with the PM/LS
- Connector inspection at both ends
- 1-Jumper reference supported for LC/SC/FC/ST connections







OTDR Certification Report

Company Name: New Media Company		
Customer:		
Test Date: 10/8/2021 6:51:00 AM	Operator: Dan B	
Model Number: FTE-7100-QUAD-VP-PM	Fiber Type: Single Mode	
Serial Number: Power Meter	Cable Type: ISP	
Version: 0.0.1.8	Cal Date: 0/0/0	
Cable ID: Floor 1-Floor 10	Test Standard: ANSI/TIA 568.3-D: 2019	
Fiber ID: 06	Location From: Main Cross Connect	
	Location To: Floor 10 ISF	

Trace Parameters

Wavelength	1310 nm
Pulse Width	10 ns
Range	1 km
Averages	344
Index of Refraction	1.4675

Pass/Fail Parameters

Splice Loss Threshold	< 0.30 dB
Connector Loss Threshold	< 0.75 dB

Results Overview

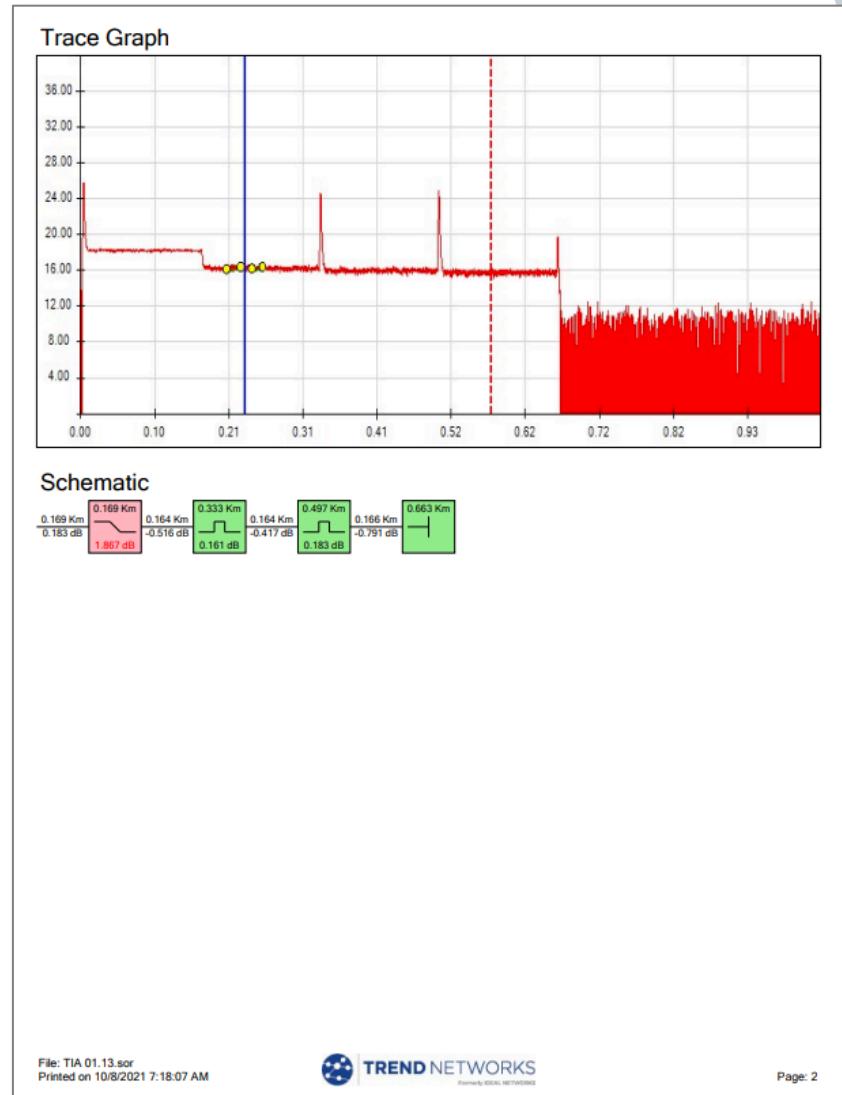
Total Length	0.663Km
Link Loss	1.749dB
System ORL	40.76dB

Event Table

Event #	P/F	Distance	Loss	2 Point	dB/Km	Reflectance	Type
Span 0 - 1		0.1688 Km		0.1830 dB	1.159 dB/Km		Span
Event 1	Fail	0.1688 Km	1.867 dB				Splice
Span 1 - 2		0.1638 Km		-0.5160 dB	-3.218 dB/Km		Span
Event 2	Pass	0.3326 Km	0.161 dB			-51.5 dB	Connector
Span 2 - 3		0.1643 Km		-0.4170 dB	-2.763 dB/Km		Span
Event 3	Pass	0.4969 Km	0.183 dB			-50.5 dB	Connector
Span 3 - 4		0.1660 Km		-0.7910 dB	-5.224 dB/Km		Span
Event 4		0.6628 Km				-61.7 dB	End (Reflection)

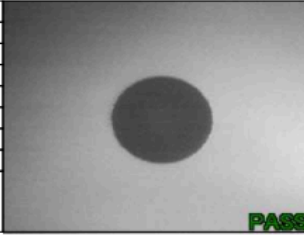
File: TIA 01.13.sor
Printed on 10/8/2021 7:18:06 AM

Page: 1





OTDR Certification Report

Company Name:		
Customer:		
Test Date: 10/8/2021 7:18:00 AM	Operator:	
Model Number: FTE-7100-QUAD-VP-PM	Fiber Type: Single Mode	
Serial Number: Power Meter	Cable Type:	
Version: 0.0.1.8	Cal Date: 0/0/0	
Cable ID:	Test Standard: 10G-LX4 SMM3-D: 2019	
Fiber ID:	Location From:	
	Location To:	



Trace Parameters

Wavelength	1310 nm
Pulse Width	10 ns
Range	1 km
Averages	344
Index of Refraction	1.4676

Pass/Fail Parameters

Link Loss Threshold	< 6.30 dB
Length Threshold	< 10.00 Km

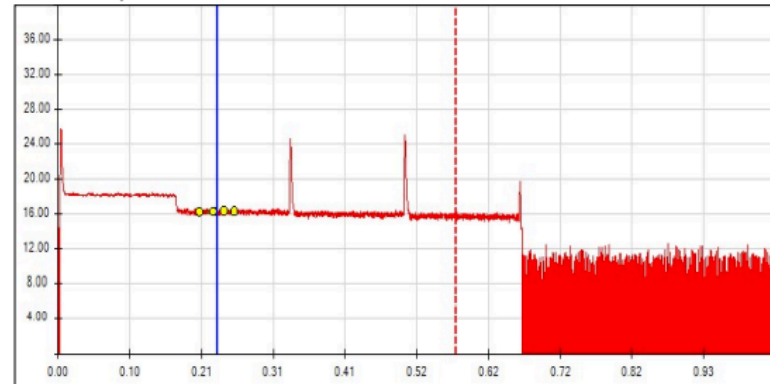
Results Overview

Total Length	0.663Km
Link Loss	-7.540dB
System ORL	40.71dB

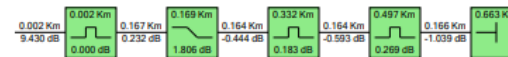
Event Table

Event #	P/F	Distance	Loss	Z Point	dB/Km	Reflectance	Type
Span 0 - 1		0.0022 Km		9.4300 dB	4345.036 dB/Km		Span
Event 1	Pass	0.0022 Km	0.000 dB			-15.4 dB	Connector
Span 1 - 2		0.1666 Km		0.2320 dB	1.487 dB/Km		Span
Event 2	Pass	0.1688 Km	1.806 dB				Splice
Span 2 - 3		0.1637 Km		-0.4440 dB	-3.009 dB/Km		Span
Event 3	Pass	0.3324 Km	0.183 dB			-51.5 dB	Connector
Span 3 - 4		0.1644 Km		-0.5930 dB	-3.783 dB/Km		Span
Event 4	Pass	0.4969 Km	0.269 dB			-50.5 dB	Connector
Span 4 - 5		0.1660 Km		-1.0390 dB	-6.856 dB/Km		Span
Event 5		0.6628 Km				-62.7 dB	End (Reflection)

Trace Graph



Schematic



The FiberMASTER range of fibre optic testers...

High performance

Compact size

Light Weight

Extraordinary value

No compromises

www.trend-networks.com





FiberMASTER OTDR

This virtual simulation of the FiberMASTER OTDR demonstrates much of the user interface function.

The yellow boxes indicate active buttons that can be pressed to simulate that function.

The Home Screen features four main functions as well as the settings, VFL and Information functions.

The OTDR button is where the OTDR is configured and tests are run.

The View button loads the previously run OTDR trace.

The Scope button activates the video inspection probe.

The PM/LS button activates the power meter and light source functions.

The VFL button activates the visual fault locator if equipped.



<https://adobe.ly/3Anskl5>