



# 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

## 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.

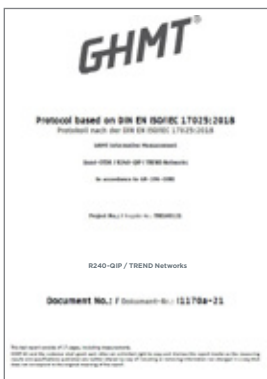
As one of the smallest OTDRs in the World you will find them easier to carry and operate whilst the ruggedised housing will protect your investment.

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.



# 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 fibres, PON systems and maintain accuracy on high-loss fibres



## 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 fibre technology

We have over 30 years' experience in developing fibre optic testers and OTDRs at our R&D fibre 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 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.



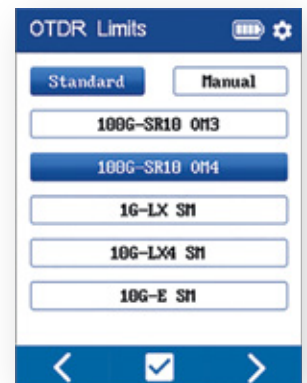
Home screen



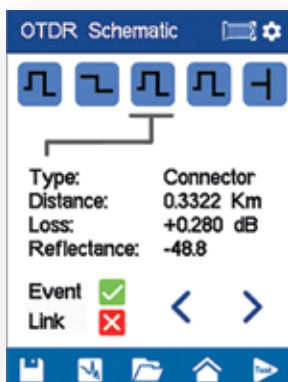
Select the wavelength(s)



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 Fibre 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 fibre 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.

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

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

### 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

# 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

Company Name: Central Installations	
Customer: University	
Test Date: 2/20/2021 12:11:00 PM	
Operator: John M	
Model Number: R2400	Fiber Type: Single Mode
Serial Number: 4320	Cable Type: OSP
Cable ID: A.12	Location From: Building A
Fiber ID: 06	Location To: Building B

**Trace Parameters**

Wavelength	1550 nm
Pulse Width	30 ns
Range	4 km
Averages	12784

**Pass/Fail Parameters**

Link Loss Threshold	< 20 dB
Link ORL Threshold	> 20 dB
Loss Threshold	< 3 dB
Reflectance Threshold	< -20 dB

**Results Overview**

Total Length	1.207 Km
Link Loss	4.284 dB
Link ORL	40.57 dB

**Event Table**

Event #	RF	Distance	Splice	2 Point	dB/Km	Reflectance	Type
Span 0 - 1	Pass	0.2231 Km		0.8670 dB	0.321 dB/Km		Span
Event 1	Pass	0.2230 Km	0.591 dB			-55.2 dB	Reflection
Span 1 - 2	Pass	0.1731 Km		0.0740 dB	0.453 dB/Km		Span
Event 2	Pass	0.3960 Km	1.631 dB			-55.4 dB	Reflection
Span 2 - 3	Pass	0.3799 Km		0.0490 dB	0.133 dB/Km		Span
Event 3	Pass	0.7760 Km	1.936 dB				Splice
Span 3 - 4	Pass	0.3319 Km		0.0750 dB	0.177 dB/Km		Span
Event 4		1.2070 Km				-68.2 dB	End (Reflection)

## Specifications

OTDR	
Wavelength	850, 1300, 1310, 1550, (PON) 1625 nm
Dynamic Range (dB)	29/30 MM, 37/38 SM, 36 PON
Dead Zones	1m Event, 5m Attenuation
Resolution	6 cm - 16 m / 2 in - 52 ft
Distance Uncertainty	±(0.75m + 0.005% x distance + sampling res.) Verified by GHMT® 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 51 mm (2.0 in) 730 g (1.6 lbs)
Connector	SC included. FC, ST optional
VFL	1 mW (5 km), 2.5 mm Universal
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 fibre cleaner STC-TC 2.5mm
- 33-963-11 - One-click fibre cleaner STC-FC 1.25mm

# FiberMASTER

Quad / PON OTDR /  
Light Source



- Quad / PON OTDR
- Video Inspection Probe Connector
- Power Meter

**Product Size**  
Height = 170mm  
Width = 108mm  
Depth = 51mm

Multimode / Single-mode  
OTDR



- MM/SM OTDR/  
Light Source Port
- VFL Port
- Video Inspection  
Probe Port
- Power Meter

Power Meter



- VFL Port
- Video Inspection  
Probe Port
- Power Meter

Rubber ears protect  
optical connectors

**Intuitive User  
Interface**

Simplified user interface for  
easy setup and operation

**Touchscreen**

for ease of use

**Instant boot-up**

**Lithium polymer  
battery**

For 10 hours continuous usage



A handy stylus is  
clipped into the  
back of the tester

**Kickstand for  
bench use**

**Extra thick rubber  
housing to protect  
your investments**



# 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	<b>FiberMASTER</b> 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	<b>FiberMASTER</b> Multimode OTDR (850/1300) with SC connector, Inspection port, Power meter	1	1	1				1	1	1	1	2
R240-SIPV	<b>FiberMASTER</b> Single-mode OTDR (1310/1550) with SC connector, Inspection port, Power meter	1			1	1		1	1	1	1	2
R240-PIP	<b>FiberMASTER</b> PON OTDR (1310/1550/1625) with SC-APC connectors, Inspection port, Power meter	1					1		1	1	1	2
R240-LSIV	<b>FiberMASTER</b> Quad light source with LC connectors, Inspection port, VFL		1	1	1	1		1	1	1	1	2
R240-PMIV	<b>FiberMASTER</b> Multimode/single-mode power meter with interchangeable LC/SC/FC/ST connectors, Inspection port, VFL		1	1	1	1		1	1	1	1	2
R240-PMLS	<b>FiberMASTER</b> 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 Fibre 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-Encircled Flux 50/125um Cable SC - SC
R164051	FT III/IV-Encircled 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  
Stokenchurch House, Oxford Road, Stokenchurch,  
High Wycombe, Bucks, HP14 3SX, UK.  
Tel. +44 (0)1925 428 380 | Fax. +44 (0)1925 428 381  
uksales@trend-networks.com



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