

# 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

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# 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.

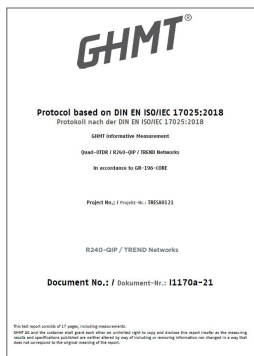
As one of the smallest OTDRs in the World you will find them easier to carry and operate whilst the ruggedised housing will protect your investment.

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.



# 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.**

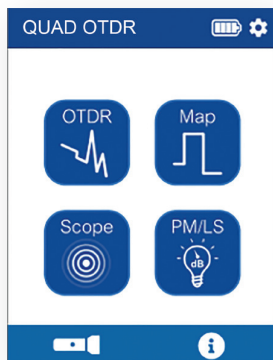
The OTDRs feature both high dynamic range and small dead zones providing the precision required for installation and troubleshooting alike. The software simplifies certification of cabling

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.

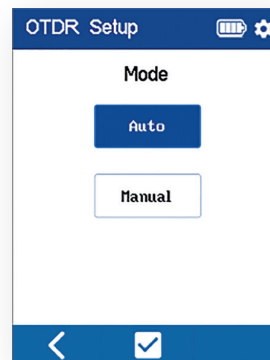
For FTTx/FTTH applications the PON OTDR identifies split ratios for easy testing and troubleshooting of inactive and active networks. The 1625nm wavelength allows in-service testing of networks without interrupting existing subscribers.



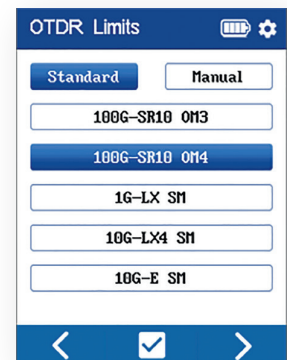
Home screen



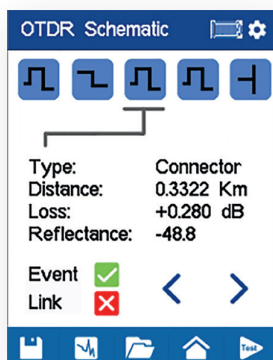
Select the wavelength(s)



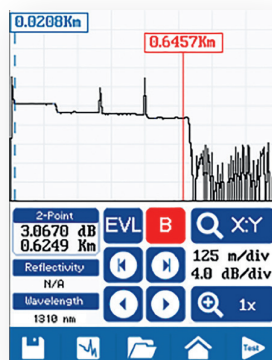
Select mode



Select the application



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



OTDR trace shown for detailed analysis





## 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

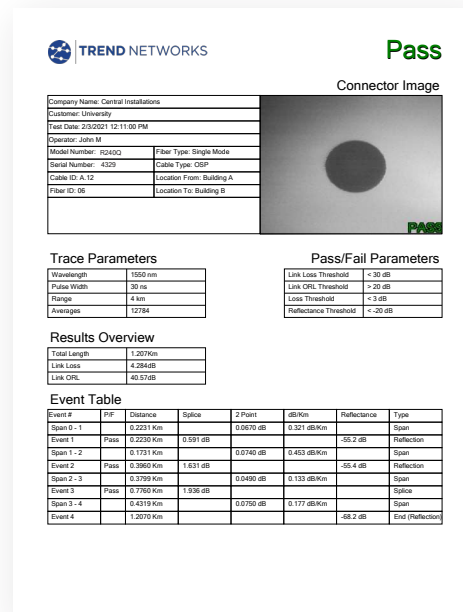
90% of all fibre optic cable and network issues arise from dirty and/or damaged fibre connectors which is why the Fibre Inspection Probe is an essential piece of equipment for any fibre cable installer or technician.

### 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.



## 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.)<br>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)<br>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<br>± 0.25 dB from 0 to -65 dBm,<br>± 0.35 dB from 0 to +5 dBm<br>± 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 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
- 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

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



## Product Size

Height = 170mm

Width = 108mm

Depth = 51mm



# 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                                                                                  |



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Specification subject to change without notice. E&OE  
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