

MT9083 Series

MT9083A/B ACCESS Master™

850/1300 nm OTDR for Multimode Fiber

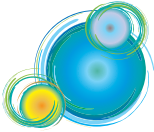
780/1310/1383/1490/1550/1625/1650 nm OTDR for Single Mode Fiber



New

MT9083B Series ACCESS Master Featuring Enhanced Performance

MT9083B Series and MT9083A-073 ACCESS Master feature dual operation with High Resolution (HR) and Enhanced Range (ER) operating modes. The exclusive ER mode provides unparalleled fault location for PON and significantly reduced testing time for all networks.



All-in-One Solution for Optical Fiber Construction and Maintenance of FTTx, CATV, LAN, Access and Metro Networks

850/1300 nm OTDR for MMF

780/1310/1383/1490/1550/1625/1650 nm OTDR for SMF

MT9083 ACCESS MASTER SERIES OVERVIEW

Optical fibers are a key technology in today's modern communications systems, including access networks such as FTTx, CATV, and optical LANs. Moreover, optical-fiber technologies are playing increasingly important roles in mobile communications and digital broadcasting systems. Technicians maintaining these diverse systems are forced to carry a large variety of test equipment on-site, including OTDRs, Light Sources, Optical Power Meters, Visible Light Sources, etc., as well as a notebook computer for evaluating the FTTx QoS. On the other hand, fiber construction requires measuring instruments with different functions and performance. As an example, FTTx access networks use single mode (SM) fiber whereas optical LANs use multimode (MM) fiber. In addition, core and backbone networks utilize long fibers while optical access networks use short fibers, both requiring different types of measuring instruments with different performance. But now Anritsu's new line of MT9083 ACCESS Master OTDRs solves all these problems by providing all the measurement functions and performance required for optical fiber construction and maintenance in a compact, lightweight, all-in-one unit that eliminates the burden of carrying many different test sets and instruments on-site. Whatever your work, construction or maintenance, long haul or intra-building, Anritsu has an MT9083 model for your needs.

ACCESS Master Key Features

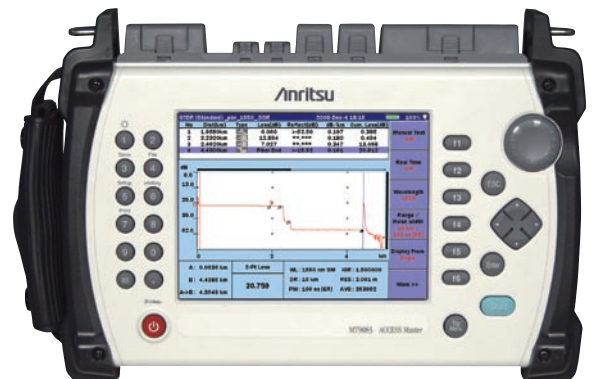
- Two models: MT9083A - standard operation and range, MT9083B - enhanced range with full PON support
- Ready to test of ACCESS Master is about 15 seconds...and all day without recharging
- Specialized testing modes simplify operation
- High resolution and high dynamic range ensure thorough and complete fiber evaluation
- Intelligent analysis software identifies problem splices, connectors and even macrobends
- Rugged, sealed design provides years of service in the most challenging environments
- IP testing option verifies throughput, frame loss and point-to-point connectivity
- Test up to four wavelengths with a single unit - single mode, multimode or both
- Unique in-service testing without the need for external filters
- Verify connector quality with optional connector inspection microscope

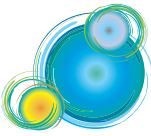
MT9083 Series

MT9083A/B ACCESS Master™

850/1300 nm OTDR for Multimode Fiber

780/1310/1383/1490/1550/1625/1650 nm OTDR for Single Mode Fiber





New Feature Highlight

Optimized for verifying PON splitters up to 1x64 count

The MT9083 Enhanced Series provides unparalleled fault location for all PONs. Whether testing single splitter applications up to a 1x64 or closely spaced distributed splitters, the ACCESS Master provides the highest resolution available for installing and maintaining FTtx networks.

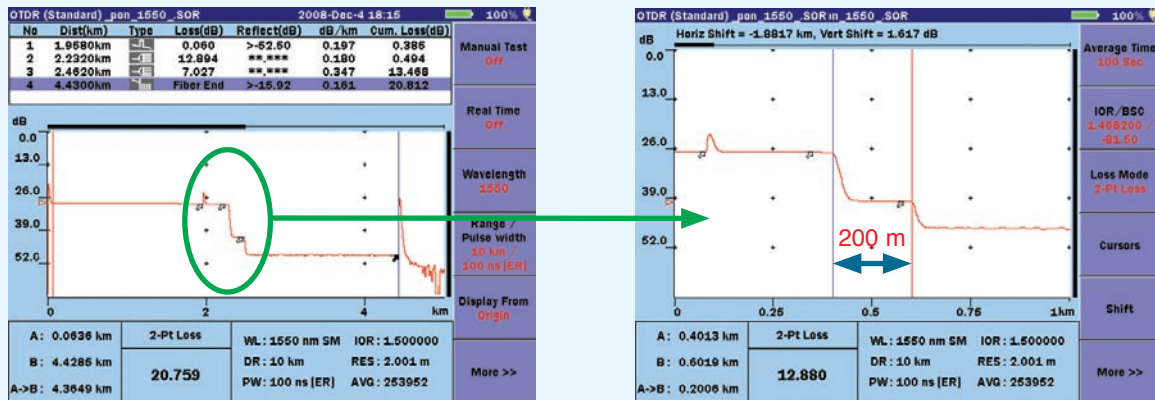
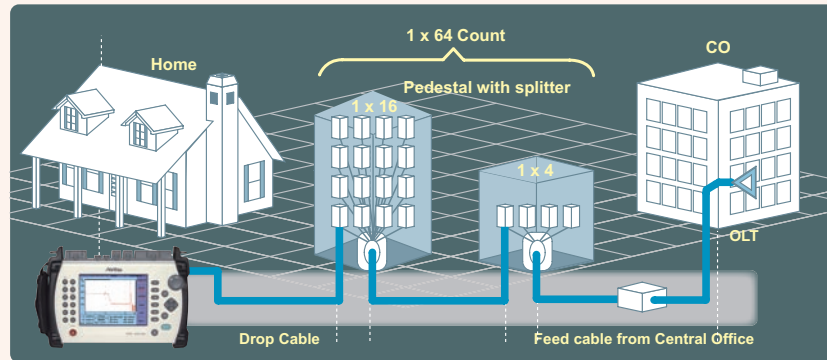


Fig 1: Typical PON System Measurement from the customer premise.

The MT9083B Enhanced Range Mode and a Pulse width of 100 ns provides excellent dynamic range while not compromising deadzone resolution to clearly display multiple, high loss splitters.

Enhanced performance to reduce testing time by 75%

The MT9083B features a typical dynamic range of 42 dB allowing fibers up to 200 km to be measured. It is also optimized at the most commonly used pulse widths like 100 ns to provide excellent resolution and measurement distance while greatly reducing test time.

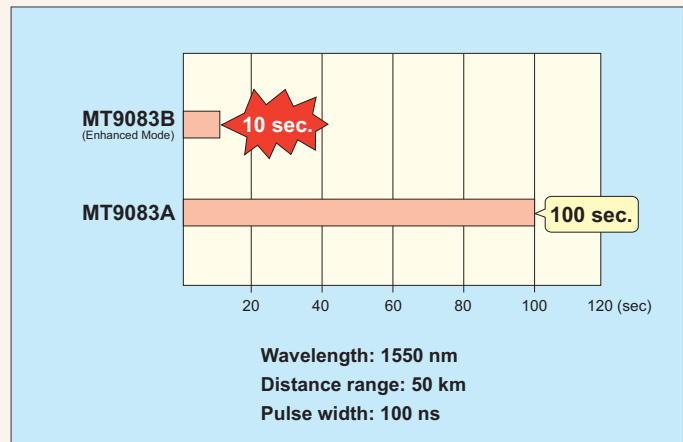
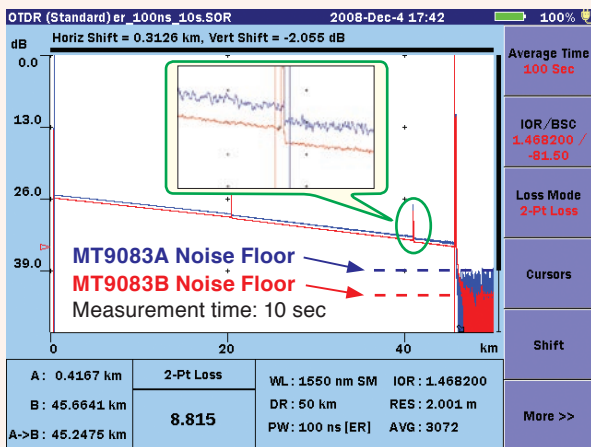
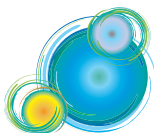


Fig. 2: Improved measurement range from MT9083A to MT9083B (100 ns shown)



Designed with the Features that Matter Most

When buying products, you tend to choose ones that are innovative and from established companies. When you need to install and maintain optical networks, this should also apply. With over 50 years of combined OTDR design, Anritsu, delivers the features that matter.

Having been in the test and measurement business for a long time, we understand that things like performance, portability, reliability, easy operation and of course price are important.

Quick Startup

The ACCESS Master is ready for measurement about 15 seconds after power-on so productive work can start immediately.

Long Battery Life

Since AC power is not always available where you need it, especially at fiber pedestals, the MT9083 typically provides up to 8 hours of operation on a single charge. This coupled with an optional car cord (for cigarette lighter operation) guarantees the MT9083 is ready when you are.

Portable

With its light weight design and user friendly dimensions, the MT9083 is perfect for the outside plant environment and can easily be managed with one hand. The shoulder strap (part of the protector option) further increases portability when travelling from the truck to the testing site.

Rugged

The MT9083 features a solid casework with no fans or vents to keep dust or moisture from entering the unit. In addition, the protector option (MT9083A/B-010) includes rubber bumpers and a display cover for additional protection from those minor mishaps.

Generous Data Storage

With the ability to store up to 1,000 traces in internal memory and up to 30,000 via a USB device, the MT9083 offers plenty of storage for collecting and managing data.

No Experience Required

With the ACCESS Master, the experience is built in. With specialized testing modes, automatic parameter selection, PASS/FAIL indicators as well as features to virtually eliminate the chance to get "bad" results, the MT9083 can make anyone seem like a 20 year veteran. Let it help you master your network.

Easy "drag and drop" File Transfers

When the MT9083 is connected to a PC via a USB cable, the internal memory of the ACCESS Master can be directly accessed. Data can be selected, dragged and dropped into the PC memory, greatly simplifying file transfers. The MT9083 also supports use of USB memory sticks.

Common OTDR Data Format

The MT9083 supports the universal Telcordia SR-4731 (issue 2) format making it compatible with not only legacy Anritsu and NetTest products, but with many other vendors data.

Free and Simple Software Upgrades

Firmware upgrades are easily performed via USB and available from the Anritsu website for registered users or through Anritsu customer support.

Active fiber check

Not only can OTDR measurements be effected when the optical fiber is in-service but there is a potential risk of damage to the transmitter and OTDR receiver. To prevent these problems, the MT9083 verifies if light is present before starting measurement and will not transmit if it is. An on-screen warning and internal OTDR protection are also part of this useful feature.

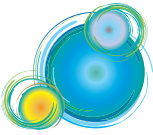
Integrated Macrobend Detection

With many technicians making the switch from copper installations to optical fiber, installation issues such as macrobends are bound to occur. To help prevent this, Anritsu has developed a macrobend detection feature for the MT9083 that will alert technicians when a possible macrobend is present. This provides a higher quality of service for the customer and eliminates costly troubleshooting for you.

Wavelengths for Today's Networks

Sometimes you just need more than the traditional 1310 and 1550 nm wavelengths to certify your next generation networks. The MT9083 offers a host of specialized wavelengths including 1383 nm for water peak verification of CWDM carrying fibers, 1650 nm (with integrated filter) for live fiber troubleshooting, 1490 nm for verification of voice, data and IP based video services and 780 nm for in-service troubleshooting of FTTx networks - without the need for any additional filters.





Compact, Light Weight and All-in-one

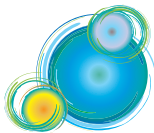
With its versatile built-in functions, the ACCESS Master offers the ideal solution for efficient optical fiber construction and maintenance.

All-in-one Test Set

The MT9083 delivers full featured OTDR performance plus loss test set and quality of service measurement in a surprisingly small and lightweight package. At only 28.4 cm wide x20 cm tall x7.7 cm deep and 2.2 kg (4.8 lbs.), it is field portable, yet rugged enough to withstand the outside plant environment. When equipped with power meter, visual light source and IP test options, it replaces several, larger pieces of test equipment.



- ① Up to 8 hour battery life plus quick recharge
- ② Optical Power meter options with up to +30 dBm measurement range
- ③ Visible laser source for easy fiber identification and bend/break location
- ④ Up to four wavelengths from a single port for any application
- ⑤ Dual USB ports for easy data transfer and connector inspection microscope
- ⑥ IP options for verifying QoS of 10/100/1000 MB links
- ⑦ Numeric keypad with dedicated keys for easy operation
- ⑧ Dedicated function keys for selecting parameters
- ⑨ Rotary dial for precision cursor movement
- ⑩ Arrow keys for quick zooming and navigation through menus
- ⑪ START key for simple one-button testing
- ⑫ 6.5 inch color, TFT-LCD display with simple menus
There are two types—a Standard type for indoor use, and an Enhanced type for use both indoors and outdoors



Exceptional OTDR Performance from the World's First OTDR Manufacturer

Evaluation of access networks ranging from a few kilometers to metro networks reaching up to 100 km in length is becoming commonplace, requiring OTDRs to have the performance and functions for evaluating both short and long fibers. Designed with this in mind, the ACCESS Master delivers on both fronts.

Improved Short Fiber Analysis

An event dead zone of less than 1 m (80 cm typical) and a sampling resolution of 5 centimeters allow the MT9083 to evaluate connections and troubleshoot central office, FTTx and intra-building faults with ease – providing a level of detail never before seen.

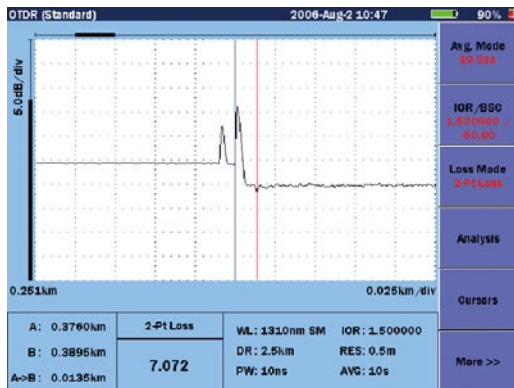


Fig. 3: With its high resolution optics, the MT9083 provides exceptional detail allowing users to quickly determine where the problem is-even when events are closely spaced.

Extended Range Testing of 100+ km Fibers

In addition to its superb high-resolution performance, the MT9083 also features up to 41 dB of dynamic range allowing it to easily test 200 km spans making it a very useful tool for any network type.

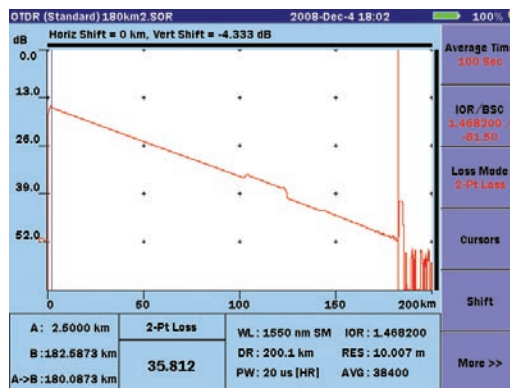


Fig. 4: Spans of over 100 km are also easily tested making the MT9083 the only tool you will need - for any network type.

Convenient Features

New

Full PON Testing

Many OTDRs claim to be able to test PONs but being able to do it with both high resolution and high range is what sets the MT9083B apart. Splitters up to a single 1x64 or closely spaced, cascaded splitters are completely and accurately measured with industry leading resolution.

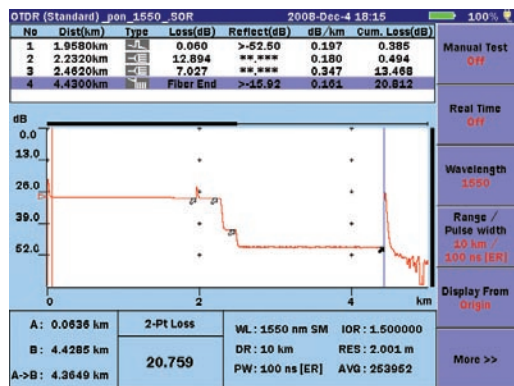


Fig. 5: MT9083B/MT9083A-073 provides high range and excellent resolution of PON systems

New

Dual-Mode High Resolution/Enhanced Range Operation

While many OTDRs provide good deadzone resolution or high dynamic range, the MT9083B/MT9083A-073 features a dual-mode design that allows a single unit to excel in both categories. The user can simply select HIGH RESOLUTION (HR) mode or ENHANCED RANGE (ER) based on the current task at hand. When HR mode is selected, the MT9083B/MT9083A-073 provides good measurement range with an industry leading deadzone (<1 m). When ER mode is selected, the MT9083B/MT9083A-073 provides unparalleled performance for measurement distance, measurement speed and deadzone - allowing a 100 km fiber to be tested in less than 10 seconds. ER mode is also used for testing PON networks with up to 64 branches.

Event Table with User Defined Thresholds

PASS/FAIL thresholds for key acceptance criteria such as splice loss, connector loss and reflectance can be set in the MT9083 allowing technicians to easily assess a fiber's condition. Failing values are clearly highlighted in the event table alerting technicians of potential problems.

Waveform Comparison Function

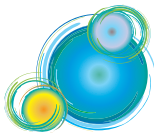
Compare current and stored trace data to easily assess changes over time and to locate problems before they effect service or compare traces at different wavelengths to identify installation issues such as macrobending.

Supports Two Display Types

There are two types of 6.5 inch, TFT color LCDs: the standard type (MT9083A/B), offering easy viewing for indoors, and the enhanced type (MT9083A1/B1), offering easy viewing for working both indoors and outdoors - even in direct sunlight.

Multiple Wavelengths and Models

With nine available wavelengths spanning both single mode and multimode, the ACCESS Master MT9083 is sure to meet your individual needs. Up to four of these wavelengths can be combined into a single optical output providing full spectrum characterization.



Solutions for Various Measurement Needs

Products that offer many features are often complicated to use. The ACCESS Master however, simplifies operation by offering task-specific testing modes that automate testing and guide novice users. Dedicated testing modes are available for fault location, cable installation, loss budget testing, visual fault location and IP testing.

Simple Operation

To simplify testing, the MT9083 features dedicated measurement modes via the top menu to automate and simplify the task at hand.

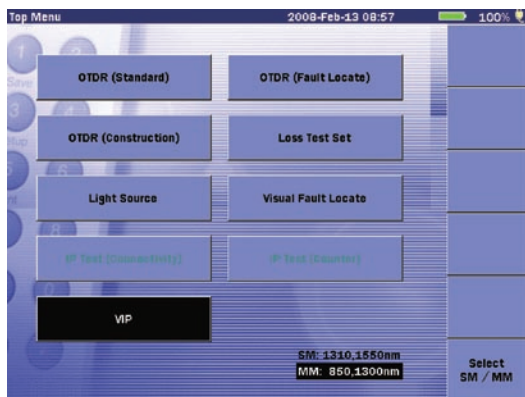


Fig. 6: Dedicated measurement modes simplify testing for any skill level.

NETWORKS PC Software for Analysis and Reporting

Once the data is collected, NetWorks PC emulation software makes analysis and report generation a breeze. Professional reports including splice loss, fiber acceptance and exceptions as well as various printing options are possible with only a few mouse clicks.

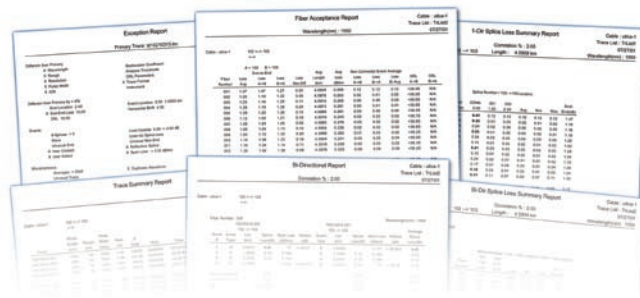


Fig. 7: Comprehensive, professional reports are easily generated

Fault Location

FAULT LOCATE mode is designed for the novice or someone who only uses an OTDR occasionally. Simply connect the fiber and press START. The unit will verify the fiber is connected correctly, select testing parameters and provide a text response indicating fault/break location - easy to read results for any skill level.



Template Feature

To simplify fiber acceptance, the Access Master incorporates an on-the-fly template feature to quickly locate and measure all splices in a fiber cable. In addition, an on-screen highlight blocks out the expected splice locations during trace acquisition.

General OTDR Testing

For those who have more experience or would like to perform more advanced testing, STANDARD OTDR mode allows the user to set all parameters and compare traces manually, automatically or somewhere in between.

Optical Fiber Construction and Certification

When final cable acceptance is the task at hand, CONSTRUCTION mode greatly simplifies operation through its innovative wizard. Select the required testing wavelengths, number of fibers and file naming scheme and construction mode acts as the project manager guiding the user through the testing, while ensuring consistency with testing parameters and filenames - virtually eliminating user induced errors and missing files.

Value

Whatever your construction or maintenance needs, the new ACCESS Master MT9083 is designed to reduce the time to install, commission and maintain your optical networks – without breaking your budget.

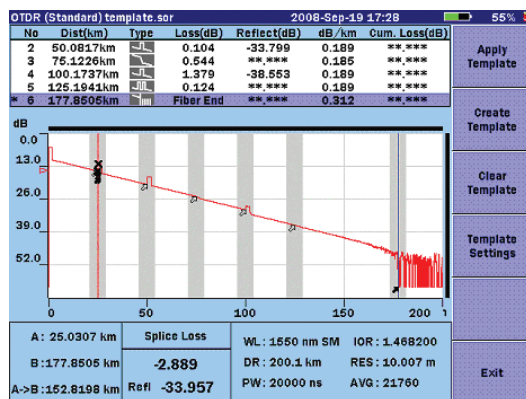
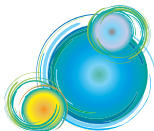


Fig. 8: Template Mode



A True all-in-one Tester

An OTDR, Optical Power Meter, Visible Light Source, and IP tester are built into Anritsu's compact, light-weight MT9083 supporting tasks ranging from searching for faults in optical fibers to QoS evaluation to FTTx troubleshooting with just one unit.

Complete Loss Test Set Features

Standard Stabilized Light Source

The OTDR port also functions as a stabilized light source providing continuous wave, 270 Hz, 1 kHz and 2 kHz modulations for easy fiber identification. This is standard equipment on all single mode models - a chargeable option on most other OTDRs.

Standard or optional Integrated Power Meter

In the base unit, the OTDR port also functions as an integrated power meter for verification of optical power levels. Additional power meter options are available for higher power transmissions and loop-back testing.

Visual Laser Source for easy fault location and fiber identification

A Visible Light Source is useful for tracking down bad connections, splices and fiber management issues such as macrobends. The optional Visible Light Source is factory installed in the MT9083 and features up to 5 km (3 miles) of operation.

Data Table for Saved Results

Loss test set measurements for multiple wavelengths can be saved into a results table for easy comparison and archiving. The table can also be saved as a text file and exported to a PC spread-sheet program for further manipulation or integration into a standard company template.

Video Inspection Probe Support

When equipped with the optional connector video inspection probe (VIP), the MT9083 becomes a powerful tool for evaluating connector cleanliness and quality. Connector end faces can be safely viewed and images stored to document all aspects of your network.

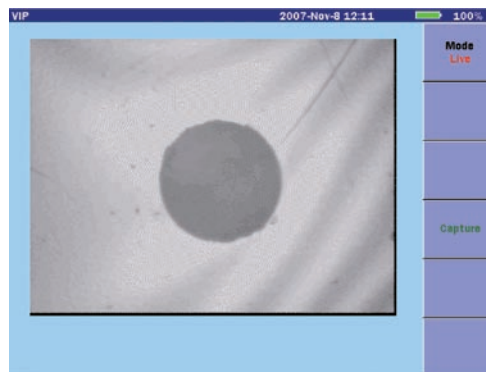


Fig. 9: VIP Mode

Optical Access Network QoS Evaluation Using IP Testing

Faults that cause drops in FTTx service speed are handled differently according to whether the cause is outside or inside the building. In addition, business users are starting to think about guaranteed bandwidth services and higher-speed gigabit services. The ACCESS Master has a built-in IP Network Connection Check function that can be used for both optical fibers and optical access QoS evaluation.

Connection and Ping Tests

The first step in testing a service is to verify continuity. The built-in IP Connection Test Function supports both PPPoE and DHCP services.

FTTx Download Speed Evaluation

FTTx service performance is easily evaluated from the download throughput. Previous evaluation systems were always limited by the PC performance (CPU speed, memory size, OS, load) and never provided accurate measurements. Using the MT9083 Download Throughput Measurement function frees the results from the impact of PC performance and provides accurate results. This allows the causes of drops in FTTx service speeds to be pinpointed to the network side or the user's PC side.

Throughput Measurement and Frame Counter

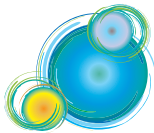
The ACCESS Master has a two-way throughput measurement function for efficient evaluation of guaranteed bandwidth services. When an MT9083 is connected to each end of the service, both the upload and download speeds can be evaluated. And since the built-in frame counter functions can be used to measure received frame types and to count error frames, network usage efficiency can be measured easily too.

Gigabit Ethernet Support

The MT9083 has an optional built-in 1000Base-T electrical interface for evaluating Gigabit Ethernet throughput (up to full line rate) for verifying performance on increasing common Gigabit Ethernet service.

Faults Identified

When issues are present, possible causes are displayed on-screen to help isolate the source of the problem.



Specification

MT9083A/B ACCESS Master Common Specifications

| Item | General Specifications | |
|--------------------------|---|--|
| Dimensions and Mass | Without protector (option 010) | Size: 270 (W) x 165 (H) x 61 (D) mm 10.6 x 6.5 x 2.4 inches |
| | | Weight: 2.2 kg (4.8 lbs) including battery |
| | With protector (option 010) | Size: 284 (W) x 200 (H) x 77 (D) mm 11.2 x 7.9 x 3 inches |
| | | Weight: 2.9 kg (6.4 lbs) including battery |
| Display | 6.5 inch TFT-LCD (640 x 480, with backlight, transparent type), enhanced indoor/outdoor optional | |
| Interface | USB 1.1, TypeA x1 (memory), Type B x1 (USB mass storage). | |
| Data Storage | Internal memory: 440 MB (up to 1000 traces), External memory (USB): up to 30,000 traces with 512 MB | |
| Power Supply | 12 VDC, 100 to 240 VAC, Allowable input voltage range: 90 to 264 V, 50/60 Hz | |
| Battery | Type: Lithium ion Operating Time*1: 8 hours Recharge Time: <5 hours (power off) | |
| Power Saving Functions | Backlight off: disable/1 to 99 minutes Auto shutdown: disable/1 to 99 minutes | |
| Vertical Scale | 0.13, 0.33, 0.65, 1.3, 3.25, 6.5, 13 dB/div | |
| IOR Setting | 1.400000 to 1.699999 (0.000001 steps) | |
| Units | km, m, kft, ft, mi | |
| Languages | user selectable (English, Simplified Chinese, Traditional Chinese, French, German, Italian, Korean, Portuguese, Russian, Spanish and Swedish - contact Anritsu for availability of others) | |
| Sampling Points*2 | Normal: 5001, High density: 20001 or 25001 | |
| Sampling Resolution*3 | 5 cm (min) | |
| Reflectance Accuracy | Single mode: ± 2 dB, multimode: ± 4 dB | |
| Distance Accuracy | ± 1 m ± 3 x measurement distance x 10^{-5} \pm marker resolution (excluding IOR uncertainty) | |
| Distance Range | Single mode: 0.5, 1, 2.5, 5, 10, 25, 50, 100, 200 km (except 780 nm: 0.5, 1, 2.5 km) Multimode: 0.5, 1, 2.5, 5, 10, 25, 50, 100 km | |
| Testing Modes | Fault locate: provides end/break location, end to end loss, fiber length Standard OTDR: user selectable automatic or manual set-up Construction OTDR: automated, multi-wavelength testing Light source: stabilized light source (CW, 270 Hz, 1 kHz, 2 kHz output) Loss test set (optional): power meter and light source Connector Video Inspection Probe Visual fault locator (optional): visible red light for fiber identification and troubleshooting | |
| Fiber Event Analysis | Auto or manual operation, displayed in table format User defined PASS/FAIL thresholds: - reflective and non-reflective events: 0.01 to 9.99 dB (0.01 dB steps) - reflectance: -70.0 to -20.0 dB (0.1 dB steps) - fiber end/break: 1 to 99 dB (1 dB steps) Number of detected events: up to 99 Macrobend detection | |
| OTDR Trace Format | Telcordia universal. SOR, issue 2 (SR-4731) | |
| Other Functions | Real time sweep*4: 0.15 second Loss modes: 2 point loss, dB/km, 2 point LSA, splice loss, ORL Averaging modes: timed (1 to 3600 seconds) Live Fiber detect : verifies presence of communication light in optical fiber Connection check: Automatic check of OTDR to FUT connection quality Trace overlay and comparison, Template function, USB keyboard support | |
| Environmental Conditions | Operating temperature and humidity: 0 to +40°C, <80% (non-condensing) Storage temperature and humidity: -20 to +60°C, <80% (non-condensing) Vibration: Conforming to MIL-T-28800E Class 3 Dust proof: MIL-T-28800E Class 2 Drip proof: IP51 (IEC 60529), JIS C 0920 TYPE I | |
| EMC | EN61326, EN61000-3-2 | |
| LVD | EN61010-1 | |

Notes

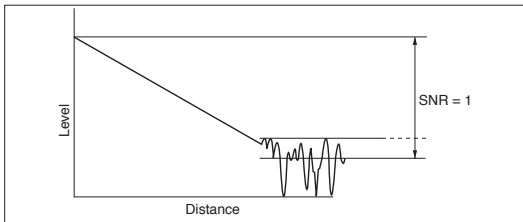
- *1 : Typical, backlight off, sweeping halted at 25°C, 6 hours typical continuous testing *4 : Resolution: Low Density. Except models 062, 068 -1 second or less
*2 : Either high density value is selected depending on distance range
*3 : Except 780 nm

OTDR Specifications

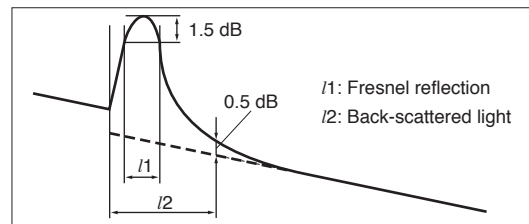
| Options | HR/ER Mode | Wavelength*5 | Fiber Type | Pulsewidth | Dynamic Range*6,7 | Deadzone (Fresnel)*8 | Deadzone (Backscatter)*9 | | | |
|------------------|------------|---|-----------------------------------|---|--------------------------------|----------------------|--------------------------|-------------------------------|----------------------|----------------------------------|
| MT9083B | 053 | √ | 1310/1550 ±30 nm | 3, 10, 20, 50, 100, 200, 500, 1000, 2000, 4000, 10000, 20000 ns | 42/41 dB *10 | ≤1 m (80 cm typical) | ≤5/5.5 m | | | |
| | 055 | √ | 1310/1550 ±30 nm, 1650 ±5 nm | | 42/41/35 dB *10 | | ≤5/5.5/6.5m | | | |
| | 057 | √ | 1310/1550/1625 ±30 nm | | 40/39/38 dB *10 | | ≤6/6.5/7.5m | | | |
| MT9083A | 050 | | 1310 ±30 nm | 3, 10, 20, 50, 100, 200, 500, 1000, 2000, 4000, 10000, 20000 ns | 38.5 dB | ≤1 m (80 cm typical) | ≤5 m | | | |
| | 051 | | 1550 ±30 nm | | 37 dB | | ≤5.5 m | | | |
| | 052 | | 1645 to 1655 nm | | 33.5 dB | | ≤6.5 m | | | |
| | 053 | | 1310/1550 ±30 nm | | 38/36.5 dB | | ≤5/5.5 m | | | |
| | 073 | √ | 1310/1550 ±30 nm | | 38/36.5 dB | | ≤5/5.5 m | | | |
| | 054 | | 1550 ±30/1645 to 1655 nm | | 36/33.5 dB | | ≤5.5/6.5 m | | | |
| | 055 | | 1310/1550 ±30 nm, 1645 to 1655 nm | | 37.5/36/33.5 dB | | ≤5/5.5/6.5 m | | | |
| | 056 | | 1310/1490/1550 ±30 nm | | 36/34.5/34.5 dB | | ≤6/6.5/6.5 m | | | |
| | 057 | | 1310/1550/1625 ±30 nm | | 36/34.5/31.5 dB | | ≤6/6.5/7.5 m | | | |
| | 058 | | 1310/1490/1550/1625 ±30 nm | | 34/32.5/32.5/29.5 dB | | ≤7/7.5/7.5/8.5 m | | | |
| | 059 | | 1310/1550/1625 ±30 nm, 1383 ±2 nm | | 34/32.5/29.5/33 dB | | ≤7/7.5/8.5/7.5 m | | | |
| | 060 | | 1490 ±30 nm | | 36.5 dB | | ≤5.5 m | | | |
| | 061 | | 1625 ±30 nm | | 33.5 dB | | ≤6.5 m | | | |
| | 062 | | 780 ±20 nm | | 8 dB (10 ns) | | ≤1 m | ≤7 m | | |
| | 068 | | 780 ±20/1550 ±30 nm | | 1550 nm above 780 nm: 5, 10 ns | | 8/36.5 dB | ≤1 m 1550 nm: (80 cm typical) | ≤7/5.5 m | |
| | 063 | | 1310/1550 ±30 nm, 850/1300 ±30 nm | | HYBRID (SMF/MMF) | | Same as SMF & MMF | 38/36.5 dB, 28/27 dB | ≤1 m (80 cm typical) | ≤5/5.5 m, ≤4/5 m (3/4 m typical) |
| | 064 | | 850/1300 ±30 nm | | Multimode (MMF) 62.5/125 μm | | 28/27 dB | ≤4/5 m (3/4 m typical) | | |
| 065 | | 850 ±30 nm | 28 dB | ≤4 m (3 m typical) | | | | | | |
| Laser Safety *11 | | IEC Pub 60825-1:2001 Class1: option 051, 052, 054, 060, 061, 062, 068 IEC Pub 60825-1:2001 Class1M: option 050, 053, 055, 056, 057, 058, 059, 063, 064, 065, 073 21 CFR1040.10 Excludes deviations caused by conformance to Laser Notice N.50 (issued 26 July 2001) | | | | | | | | |

Notes

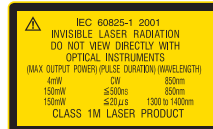
- *5: 25°C, Pulse width: 1 μs (all except 850, 1300, 780 nm), 850/ 1300 nm: 100 ns, 780 nm: 10 ns
- *6: Pulse widths: 20 μs (Options 050 to 061, 063, 068, 073, 1310/ 1550 nm) at Distance range: 100 km
Pulse width: 4 μs (Options 063, 064 1300 nm) at Distance range: 25 km
Pulse width: 500 ns (Options 063, 065 850 nm) at Distance range: 25 km
Pulse width: 10 ns (Options 062, 068 780 nm) at Distance range: 2.5 km
Averaging: 180 seconds, SNR=1, 25°C
- *7: Dynamic range (one-way back-scattered light), SNR = 1: The level difference between the RMS noise level and the level where near end back-scattering occurs.



- *8: Pulse width: 3 ns (Options 050 to 061, 063, 064, 065, 068, 073, 1550 nm)
Pulse width: 5 ns (Options 062, 068, 780 nm)
Return loss: 40 dB, 25°C (Refer to the figure below)
- *9: Pulse width 10 ns, return loss 55 dB, Deviation ±0.5 dB, 25°C (Options 050 to 055, 060 to 063, 068, 073. All except 850/1300 nm)
Pulse width 20 ns, return loss 55 dB, Deviation ±0.5 dB, 25°C (Options 056 to 059)
Pulse width 3 ns, return loss 40 dB, Deviation ±0.5 dB, 25°C (Options 063 to 065. 850/1300 nm)



- *10: Typical. Subtract 1 dB for guarantee
- *11: Safety measures for laser products
This option complies with optical safety standards in Class 1, 1M of IEC 60825-1; the following descriptive labels are affixed to the product.



THIS PRODUCT COMPLIES WITH 21 CFR 1040.10 AND 1040.11 EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO 50 DATED JULY 26 2001

| Light Source and Power Meter Specifications – Standard on all models *12 | | | |
|--|--|--|--|
| Stabilized Light Source (through OTDR port) | | Standard Integrated Power Meter *13 (through OTDR port) | |
| Item | Specification | Item | Specification |
| Wavelength*14 | Same as OTDR | Maximum Input | +10 dBm |
| Spectral Width*15 | ≤5 nm (1310 nm) ≤10 nm (1490/1550/1625 nm), ≤3 nm (1650 nm), ≤1 nm (1383 nm) | Measurement Range | –50 to –5 dBm |
| Fiber Type | Same as OTDR | Fiber Type | Same as OTDR |
| Optical Connector | Same as OTDR | Optical Connector | Same as OTDR |
| Output Power*15 | –5 ±1.5 dBm | Accuracy*18 | ±6.5% |
| Output Stability*16 | ±0.1 dB | Supported Wavelengths | 1310, 1550, 1625 nm plus * 1490 nm (056, 058, 060) * 1383 nm (059) * 1650 nm (050, 051, 053, 054, 055, 057, 061, 073) |
| Modes of Operation*17 | CW, 270 Hz, 1 kHz, 2 kHz | | |
| Laser Safety | Same as OTDR | Features | Store reference, loss table |

| Loss Test Set Specifications – Optional on all Models *12, *13 | | | |
|--|---|--|--------------------------------------|
| Power meters (004, 005 and 007) | | | |
| Option Number | MT9083A/B-007 | MT9083A/B-004 | MT9083A/B-005 |
| Fiber Type | Single Mode: 10/125 μm (G.652), Multimode: 62.5/125 μm | Single Mode: 10/125 μm (G.652) *PC only for UPC connector | Single Mode: 10/125 μm (G.652) |
| Measurement Range*19 | –67 to +6 dBm*20 | –50 to +23 dBm | –43 to +30 dBm |
| Wavelength Range | 750 to 1700 nm | 1200 to 1700 nm | |
| Calibrated Wavelengths | 850, 1300, 1310, 1383, 1490, 1550, 1625, 1650 nm | 1310, 1383, 1490, 1550, 1625, 1650 nm | |
| Optical Connector | Universal – uses LP-XX adapters | Universal – uses JXXXX adapters (same as OTDR) | Universal – uses MA9005B adapters |
| Accuracy*21 | ±5% | | |
| Modulation | CW, 270 Hz, 1 kHz, 2 kHz | | |
| Features | Store reference, loss table | | |

| Visible Light Source (Option 002) | |
|-----------------------------------|--|
| Central Wavelength | 650 ±15 nm (at 25°C) |
| Optical Output | 0 ±3 dBm (CW) |
| Output Optical Fiber | 10/125 μm, SMF (ITU-T G.652) |
| Optical Connector | 2.5 mm universal |
| Laser Safety*22 | IEC Pub 60825-1 Class 3R, 21 CFR1040.10 Excludes deviations caused by conformance to Laser Notice N.50 (issued 26 July 2001) |
| Environmental | Same as OTDR |

Notes

- *12: Some models do not support built-in light source and power meter (See next page)
- *13: If option 004, 005 or 007 is ordered, the standard integrated power meter is not available
- *14: Option 059: 1383 ±2 nm, Option 052, 054, 055: 1650 ±5 nm
- *15: CW, 25°C
- *16: CW, 0 to 40°C (±1°C) difference between max/min. values over 1 minute, SM fiber 2 m
- *17: Modulation +1.5% with 10 minute warm up
- *18: CW input, –20 dBm At 1550 nm, 23°C ±2 Using Master FC connector
- *19: Peak power, subtract 3 dB for modulated tones
- *20: –60 to +3 dBm (Option 007 @850 nm)

- *21: CW, model 007: At–10 dBm 1310/1550 nm,
At–10 dBm 850 nm 25°C
model 004/005: At 0 dBm 1310 and 1550 nm
Using Master FC connector, After zero offset

- *22: Safety measures for laser products
This option complies with optical safety standards in Class 3R of IEC 60825-1; the following descriptive labels are affixed to the product.



THIS PRODUCT COMPLIES WITH 21 CFR 1040.10 AND 1040.11 EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO 50 DATED JULY 26 2001

Standard Light Source and Power Meter Built-in

LS: MT9083A/B standard built-in stabilized light source, OPM: MT9083A/B standard built-in optical power meter

| Options | Optical Port | LS | OPM |
|---------------|---------------------------|----|-----|
| MT9083A-050 | 1310 nm SM | √ | √ |
| MT9083A-051 | 1550 nm SM | √ | √ |
| MT9083A-052 | 1650 nm SM | √ | — |
| MT9083A/B-053 | 1310/1550 nm SM | √ | √ |
| MT9083A-073 | 1310/1550 nm SM | √ | √ |
| MT9083A-054 | 1550 nm SM | √ | √ |
| | 1650 nm SM | √ | √ |
| MT9083A/B-055 | 1310/1550 nm SM | √ | √ |
| | 1650 nm SM | √ | √ |
| MT9083A-056 | 1310/1490/1550 nm SM | √ | √ |
| MT9083A/B-057 | 1310/1550/1625 nm SM | √ | √ |
| MT9083A-058 | 1310/1490/1550/1625 nm SM | √ | √ |
| MT9083A-059 | 1310/1550/1625/1383 nm SM | √ | √ |

| Model | Optical Port | LS | OPM |
|-------------|-----------------|----|-----|
| MT9083A-060 | 1490 nm SM | √ | √ |
| MT9083A-061 | 1625 nm SM | √ | √ |
| MT9083A-062 | 780 nm SM | — | — |
| MT9083A-063 | 850/1300 nm MMF | √ | — |
| | 1310/1550 nm SM | √ | √ |
| MT9083A-064 | 850/1300 nm MMF | √ | — |
| MT9083A-065 | 850 nm GI | √ | — |
| MT9083A-068 | 780 nm SM | — | — |
| | 1550 nm SM | √ | √ |

Battery pack

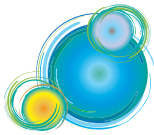
| | |
|-----------------------|--|
| Battery | Lithium Ion secondary battery |
| Voltage, capacity | 11.1 V, 4200 mAh |
| Dimensions and mass | 53 (W) x 19 (H) x 215 (D) mm, 330 g typ. |
| Operating temperature | Charging: +5 to +30°C, ≤80%RH |
| | Discharging: -20 to +60°C, ≤80%RH |
| | Storage: -20 to +50°C, ≤80%RH |

AC adapter: Z0933A

| | |
|--------------------------|---|
| Rated AC input | 100 to 240 Vac, 50/ 60 Hz |
| Rated DC output | 12 Vdc, 3 A |
| Dimensions and mass | 60 (W) x 34 (H) x 122 (D) mm, 331 ±5 g typ. |
| Environmental conditions | Operating temperature: |
| | 0 to +40°C, 20 to 80% R.H. |
| | Storage temperature: |
| | -20 to +80°C, 10 to 95% R.H. |

IP Testing Option

| Options | MT9083A/B-001 | MT9083A/B-011 |
|---|---|---|
| Name | IP Network Connection Check Function | Gigabit Ethernet Upgrade |
| Measurement IF | 10BASE-T/100BASE-TX : 1 port | 10BASE-T/100BASE-TX/1000BASE-T : 1 port |
| IF Speed | 10M/100M Full, 10M/100M Half, Auto negotiation, Auto MDI/MDI-X | |
| Connectivity Check Connection mode VLAN | OK/NG Judgment PPPoE, DHCP, Manual VLAN setup is possible in the DHCP Mode and Manual Mode. Single VLAN tag is supported. VID: 1 to 4094, COS: 0 to 7 | |
| Connection Test Ping Test Trace Route Test | Can be executed after the connection is established by using the Connectivity Check function. Number of times: 1 to 999, Timeout Threshold: 1 to 60 s Timeout Threshold: 2 to 60 s, Hops: 1 to 255 | |
| Download throughput measurement Download file size Download throughput value | Can be performed after the connection is established by using the Connectivity Check function. The full wire rate is supported. Up to 1 GB Download file size [bits] / Download time [s] | |
| Throughput measurement Frame size Transmit Rate Transmit Duration Time Resolution Loss Tolerance | Can be performed after the connection is established by using the Connectivity Check function. 64, 128, 256, 512, 768, 1024, 1280, 1518, 9018, 9618 : The frame size 9018 and 9618 can be selected when the link speed is 1000M. 1 to 100% of the line band (100% at full-wire rate), in steps of 1% 5, 10, 15, 20, 30, 60, 180, 300 s 1% or 5% of the line band 0, 0.01, 0.1, 1, 5, 10% | |
| Counter measurement Measurement time Frame type | 1 to 720 min, in steps of 1 min. All frame, Only PPPoE frame, Only VLAN frame | |



Ordering Information

Please specify the model/order number, name and quantity when ordering.

The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.

1) Specify Base Unit

Includes ACCESS Master OTDR, AC charger/adaptor, line cord, battery pack (1) and printed user's manual.

| Model/ Order No. | Description |
|------------------|--|
| MT9083A/B | ACCESS Master base unit, Standard display for indoor use |
| MT9083A1/B1 | ACCESS Master base unit, Enhanced display for indoor/outdoor use |

2) Select Optical Configuration

Includes choice of OTDR connector adapters – select in step 5 below.

MT9083B Series (OTDR Enhanced Model)

| Model/Order No. | HR/ER Mode | Wavelength | Application |
|-----------------|------------|----------------------------|--|
| MT9083B-053 | √ | 1310/1550 nm, single mode | General-purpose model for construction, maintenance and fault location |
| MT9083B-055 | √ | 1310/1550 nm & 1650 nm, SM | General-purpose models for construction, maintenance and fault location plus In-service measurement – integrated filter to block transmissions |
| MT9083B-057 | √ | 1310/1550/1625 nm, SM | General-purpose plus enhanced macrobend detection at 1625 nm |

MT9083A Series (OTDR Base Model)

| Model/Order No. | HR/ER Mode | Wavelength | Application |
|-----------------|------------|---------------------------------|--|
| MT9083A-050 | | 1310 nm, single mode | General-purpose model for construction, maintenance and fault location |
| MT9083A-051 | | 1550 nm, single mode | General-purpose model for construction, maintenance and fault location |
| MT9083A-052 | | 1650 nm, single mode | In-service measurement – integrated filter to block transmissions |
| MT9083A-053 | | 1310/1550 nm, single mode | General-purpose model for construction, maintenance and fault location |
| MT9083A-073 | √ | 1310/1550 nm, single mode | General-purpose model for construction, maintenance and fault location |
| MT9083A-054 | | 1550 nm & 1650 nm, SM | General-purpose models for construction, maintenance and fault location plus In-service measurement – integrated filter to block transmissions |
| MT9083A-055 | | 1310/1550 nm & 1650 nm, SM | |
| MT9083A-056 | | 1310/1490/1550 nm, SM | General-purpose plus 1490 nm for FTTx/PON applications |
| MT9083A-057 | | 1310/1550/1625 nm, SM | General-purpose plus enhanced macrobend detection at 1625 nm |
| MT9083A-058 | | 1310/1490/1550/1625 nm, SM | General purpose for any application or full spectrum characterization |
| MT9083A-059 | | 1310/1383/1550/1625 nm, SM | General-purpose plus supports Water Peak testing at 1383 nm |
| MT9083A-060 | | 1490 nm, single mode | FTTx/PON testing |
| MT9083A-061 | | 1625 nm, single mode | Enhanced macrobend detection |
| MT9083A-062 | | 780 nm, single mode | For troubleshooting live FTTx/PON networks |
| MT9083A-068 | | 780 & 1550 nm, single mode | For troubleshooting live FTTx/PON networks plus general testing |
| MT9083A-063 | | 850/1300 nm MM, 1310/1550 nm SM | Best unit for contractors or anyone who installs or maintains hybrid networks |
| MT9083A-064 | | 850/1300 nm, multimode | Multimode fiber model |
| MT9083A-065 | | 850 nm, multimode | Multimode fiber model |

Note: Models noted feature user-selectable enhanced range (ER) for measuring PON systems/detecting faults in short time and high resolution (HR) for the shortest dead zone.

3) Select Factory Installed Options

Must be added as separate, chargeable line items.

| Model/Order No. | Description |
|-----------------|--|
| MT9083A/B-010 | Protector option (includes rubber bumpers, display cover and shoulder strap) |
| MT9083A/B-001 | IP Network Connection Check Function |
| MT9083A/B-011 | Gigabit Ethernet Upgrade (requires option MT9083A/B-001) |



Without Protector option -010



With Protector option -010

4) Select Loss Test Set Options

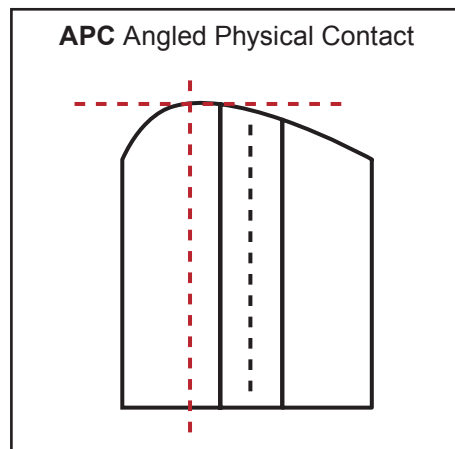
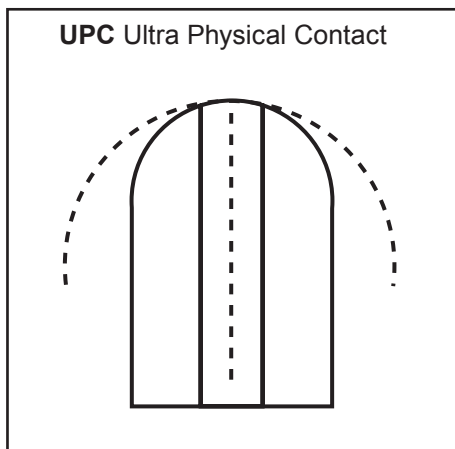
| Optical Power Meter Must be added as separate, chargeable line items. | |
|--|--|
| Model/Order No. | Description |
| MT9083A/B-004 | SMF Optical Power Meter (UPC only) |
| MT9083A/B-005 | SMF High Power Optical Power Meter (UPC/APC) |
| MT9083A/B-007 | SMF/MMF Optical Power Meter (UPC/APC) |
| Visible Light Source | |
| Model/Order No. | Description |
| MT9083A/B-002 | Visible Laser Diode |

5) Select Connector Types

The ACCESS Master MT9083 can be optioned to feature up to three optical ports – single mode OTDR, multimode OTDR and an optical power meter (options -004, -005 and -007). Selecting a single connector code below will populate all optical ports with that connector type **or** customer can select different adapters by specifying the adapter for each of the three optical ports – see examples below.

| Optical Connectors One adapter type is provided for each port at no charge - must be added as separate line items. NOTE: FC-APC and SC-APC are not available for MM OTDR or optical power meter. | | | |
|--|--|-----------------|--------------------|
| Model/Order No. | Description | Model/Order No. | Description |
| MT9083A/B-025 | FC-APC connector - single mode OTDR only (additional charge applies) | MT9083A/B-038 | ST connector |
| MT9083A/B-026 | SC-APC connector - single mode OTDR only (additional charge applies) | MT9083A/B-039 | DIN connector |
| MT9083A/B-033 | LC connector | MT9083A/B-040 | SC connector |
| MT9083A/B-037 | FC connector | MT9083A/B-043 | HMS-10/A connector |

Note: UPC and APC connectors are not compatible – the internal optics are different and must be specified at time or order.



Examples:

1) MT9083B-053 with MT9083B-004 power meter option

Customer can specify “MT9083B-040 for the SM OTDR” port and “MT9083B-037 for the OPM” port at no charge.

2) MT9083A-063 with MT9083A-007 power meter option

Customer can specify “MT9083A-040 for the SM OTDR” port, “MT9083A-037 for the MM OTDR” port and “MT9083A-037 for the OPM” port at no charge.

3) MT9083A-053 with no options

Customer can specify “MT9083A-026 for the SM OTDR” port however an additional charge applies.

6) Select Accessories & Replacement Items

| Accessories Must be added as separate, chargeable line items. | | | |
|--|--|-------------------------------------|-------------------------------------|
| Model/Order No. | Description | | |
| W2839AE | Hardcopy MT9083 operation manual | | |
| B0582A | Soft carrying case | | |
| B0583A | Hard carry case for MT9083 - attache style | | |
| B0549 | Hard carry case for MT9083 with handle and wheels | | |
| Z0921A | Replacement battery pack for MT9083 | | |
| Z0933A | Replacement AC charger/adaptor | | |
| Z0942A | External battery charger | | |
| J1295 | Car plug cord | | |
| OPTION-545VIP | Connector video inspection probe (VIP) option | | |
| NETWORKS | PC emulation software for data analysis and reporting | | |
| MT9083A/B-ES210 | 12 month extended warranty | | |
| MT9083A/B-ES310 | 24 month extended warranty | | |
| Peripherals | | | |
| BL-80R2 | Thermal printer kit (must also order BL-100W AC adapter, J1314 printer cable and BL-80-30 paper rolls) | | |
| BL-100W | AC adapter for BL-80R2 printer | | |
| J1314 | Printer cable for BL-80R2 printer | | |
| BL-80-30 | Printer paper for BL-80R2 Thermal Printer (10 rolls/set) | | |
| Retrofit Options for existing units – unit must be returned to authorized service center | | | |
| MT9083A/B-101 | IP Network Connection Check Function (Retrofit) | | |
| MT9083A/B-111 | Gigabit Ethernet Upgrade (Retrofit - requires option MT9083A/B-001 or MT9083A/B-101) | | |
| MT9083A/B-110 | Protector Option (Retrofit) | | |
| MT9083A/B-107 | SMF/MMF Optical Power Meter (Retrofit) | | |
| MT9083A/B-104 | SMF Optical Power Meter (Retrofit) | | |
| MT9083A/B-105 | SMF High Power Optical Power Meter (Retrofit) | | |
| MT9083A/B-102 | Visible LD (Retrofit) | | |
| Replacement Adapters | | | |
| Type | OTDR and Power meters (MT9083A/B-004) | Power meter (MT9083A/B-005 only) | Power meter (MT9083A/B-007 only) |
| LC | J1270 | MA9005B-33 | LP-LC |
| FC | J0617B | MA9005B-37 | LP-FC |
| Angled FC (AFC) | J0739A | MA9005B-37 | LP-FC |
| ST | J0618D | MA9005B-38 | LP-ST |
| DIN | J0618E | MA9005B-39 | LP-DIN |
| HMS-10A | J0618F | MA9005B-43 | N/A |
| SC (UPC or APC) | J0619B | MA9005B-40 | LP-SC |



Soft carrying case (B0582A)



Hard carrying case (B0583A)-Attache style



Hard carrying case (B0549)

| Basic Kits | | |
|------------------------|--|---|
| Model/Order No. | Z1093A | |
| Name | MT9083A1-053-BKIT | |
| Configuration | Model | Name |
| | MT9083A1 | ACCESS Master |
| | MT9083A-053 | SMF 1.31/1.55 μm OTDR |
| | MT9083A-010 B0582A | Protector Soft carrying case |
| Model/Order No. | Z1094A | |
| Name | MT9083A1-063-BKIT | |
| Configuration | Model | Name |
| | MT9083A1 | ACCESS Master |
| | MT9083A-063 | MMF 0.85/1.3 μm & SMF 1.31/1.55 μm OTDR |
| | MT9083A-010 B0582A | Protector Soft carrying case |
| Model/Order No. | Z1095A | |
| Name | MT9083A1-053-DKIT | |
| Configuration | Model | Name |
| | MT9083A1 | ACCESS Master |
| | MT9083A-053 | SMF 1.31/1.55 μm OTDR |
| | MT9083A-010 | Protector |
| | B0582A | Soft carrying case |
| | MT9083A-006 MT9083A-002 NETWORKS | SMF/MMF Optical Power Meter Visible LD NetWorks/OTDR |

| | | |
|------------------------|----------------------------|---|
| Model/Order No. | Z1096A | |
| Name | MT9083A1-063-DKIT | |
| Configuration | Model | Name |
| | MT9083A1 | ACCESS Master |
| | MT9083A-063 | MMF 0.85/1.3 μm & SMF 1.31/1.55 μm OTDR |
| | MT9083A-010 B0582A | Protector Soft carrying case |
| | MT9083A-006 | SMF/MMF Optical Power Meter |
| | MT9083A-002 NETWORKS | Visible LD NetWorks/OTDR |
| Model/Order No. | Z1097A | |
| Name | MT9083A1-053-CKIT | |
| Configuration | Model | Name |
| | MT9083A1 | ACCESS Master |
| | MT9083A-053 | SMF 1.31/1.55 μm OTDR |
| | MT9083A-010 | Protector |
| | B0582A | Soft carrying case |
| | MT9083A-004 MT9083A-002 | SMF Optical Power Meter Visible LD |

Note: Specify the optical connector. *-5) Select Connector Types".



Specifications are subject to change without notice.

Anritsu Corporation

5-1-1 Onna, Atsugi-shi, Kanagawa, 243-8555 Japan
Phone: +81-46-223-1111
Fax: +81-46-296-1264

• U.S.A.

Anritsu Company

1155 East Collins Blvd., Suite 100, Richardson,
TX 75081, U.S.A.
Toll Free: 1-800-267-4878
Phone: +1-972-644-1777
Fax: +1-972-671-1877

• Canada

Anritsu Electronics Ltd.

700 Silver Seven Road, Suite 120, Kanata,
Ontario K2V 1C3, Canada
Phone: +1-613-591-2003
Fax: +1-613-591-1006

• Brazil

Anritsu Eletrônica Ltda.

Praca Amadeu Amaral, 27 - 1 Andar
01327-010-Paraiso-São Paulo-Brazil
Phone: +55-11-3283-2511
Fax: +55-11-3288-6940

• Mexico

Anritsu Company, S.A. de C.V.

Av. Ejército Nacional No. 579 Piso 9, Col. Granada
11520 México, D.F., México
Phone: +52-55-1101-2370
Fax: +52-55-5254-3147

• U.K.

Anritsu EMEA Ltd.

200 Capability Green, Luton, Bedfordshire, LU1 3LU, U.K.
Phone: +44-1582-433200
Fax: +44-1582-731303

• France

Anritsu S.A.

16/18 avenue du Québec-SILIC 720
91961 COURTABOEUF CEDEX, France
Phone: +33-1-60-92-15-50
Fax: +33-1-64-46-10-65

• Germany

Anritsu GmbH

Nemetschek Haus, Konrad-Zuse-Platz 1
81829 München, Germany
Phone: +49-89-442308-0
Fax: +49-89-442308-55

• Italy

Anritsu S.p.A.

Via Elio Vittorini 129, 00144 Roma, Italy
Phone: +39-6-509-9711
Fax: +39-6-502-2425

• Sweden

Anritsu AB

Borgafjordsgatan 13, 164 40 KISTA, Sweden
Phone: +46-8-534-707-00
Fax: +46-8-534-707-30

• Finland

Anritsu AB

Teknobulevardi 3-5, FI-01530 VANTAA, Finland
Phone: +358-20-741-8100
Fax: +358-20-741-8111

• Denmark

Anritsu A/S

Kirkebjerg Allé 90, DK-2605 Brøndby, Denmark
Phone: +45-72112200
Fax: +45-72112210

• Spain

Anritsu EMEA Ltd.

Oficina de Representación en España

Edificio Veganova
Avda de la Vega, n° 1 (edf 8, pl 1, of 8)
28108 ALCOBENDAS - Madrid, Spain
Phone: +34-914905761
Fax: +34-914905762

• Russia

Anritsu EMEA Ltd.

Representation Office in Russia

Tverskaya str. 16/2, bld. 1, 7th floor.
Russia, 125009, Moscow
Phone: +7-495-363-1694
Fax: +7-495-935-8962

• United Arab Emirates

Anritsu EMEA Ltd.

Dubai Liaison Office

P O Box 500413 - Dubai Internet City
Al Thuraya Building, Tower 1, Suit 701, 7th Floor
Dubai, United Arab Emirates
Phone: +971-4-3670352
Fax: +971-4-3688460

• Singapore

Anritsu Pte. Ltd.

60 Alexandra Terrace, #02-08, The Comtech (Lobby A)
Singapore 118502
Phone: +65-6282-2400
Fax: +65-6282-2533

• India

Anritsu Pte. Ltd.

India Branch Office

3rd Floor, Shri Lakshminarayan Niwas, #2726,
HAL 3rd Stage, Bangalore - 560 038, India
Phone: +91-80-4058-1300
Fax: +91-80-4058-1301

• P.R. China (Hong Kong)

Anritsu Company Ltd.

Units 4 & 5, 28th Floor, Greenfield Tower, Concordia Plaza,
No. 1 Science Museum Road, Tsim Sha Tsui East,
Kowloon, Hong Kong
Phone: +852-2301-4980
Fax: +852-2301-3545

• P.R. China (Beijing)

Anritsu Company Ltd.

Beijing Representative Office

Room 2008, Beijing Fortune Building,
No. 5, Dong-San-Huan Bei Road,
Chao-Yang District, Beijing 100004, P.R. China
Phone: +86-10-6590-9230
Fax: +86-10-6590-9235

• Korea

Anritsu Corporation, Ltd.

8F Hyunjuk Building, 832-41, Yeoksam Dong,
Kangnam-ku, Seoul, 135-080, Korea
Phone: +82-2-553-6603
Fax: +82-2-553-6604

• Australia

Anritsu Pty. Ltd.

Unit 21/270 Ferntree Gully Road, Notting Hill,
Victoria 3168, Australia
Phone: +61-3-9558-8177
Fax: +61-3-9558-8255

• Taiwan

Anritsu Company Inc.

7F, No. 316, Sec. 1, Neihu Rd., Taipei 114, Taiwan
Phone: +886-2-8751-1816
Fax: +886-2-8751-1817