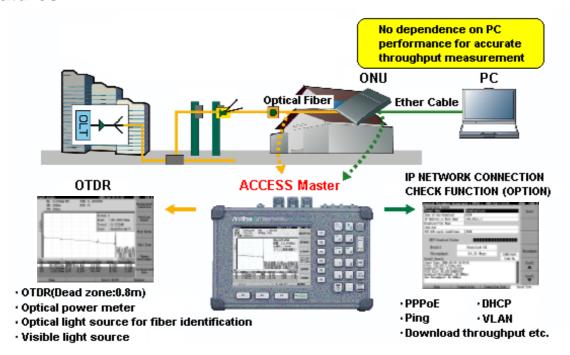
MT9080[]-001 IP Network Connection Check Function MT9080[]-011 Gigabit Ethernet Upgrade

Features



One Unit for Detecting Optical Fiber Faults and Checking Network Connections

With the recent spread of access networks, there is an accelerating trend towards use of optical fiber networking both in enterprise Gigabit Ethernet and in home optical access services, such as FTTC and FTTP. As a result, there is a need for maintenance equipment that is both easier to use and more efficient than has been available previously for optical networks.

The MT9080 Series ACCESS Master is an all-in-one measuring instrument that makes installation and maintenance of optical access networks much easier and efficient. Incorporating an OTDR, Optical light source for fiber identification, and optical power meter in a single cabinet, its powerful OTDR performance has a world-leading event dead zone of less than 1 m, permitting easy measurement and analysis of in-building connections and fault location.

Furthermore, in addition to optical fiber maintenance applications, the MT9080 Series ACCESS Master has an optional built-in IP network connection check function that can be used to check the IP connection, a function

that previously required a PC and IP tester. Just one MT9080 Series ACCESS Master is all that is needed to perform quick and comprehensive fiber maintenance and troubleshooting, greatly cutting job time.

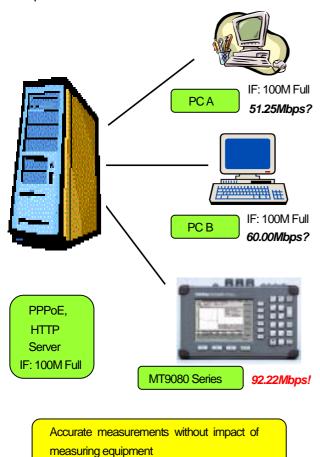
Download Throughput Measurement at Full Wire Rate

Download throughput is a simple index of optical access service performance. However, previous measurement results using a PC were seriously impacted by the performance of the PC itself (CPU speed, available RAM, OS, load status), making it difficult to obtain an accurate result. The optional IP network connection check function provides а measurement of 10Base-T/100Base-TX full-wire-rate download throughput. In concrete terms, an Http file is downloaded from a specified download site and the download speed at that time is measured and displayed. As a result, accurate measurement can be made with no effect from PC performance.

Supports 1000Base-T Interface

Measurements of Gigabit Ethernet download speeds

are approaching the limits of PC performance, making it very difficult to obtain accurate results. However, since the MT9080 Series ACCESS Master has optional support for 1000Base-T interfaces, it can be used to evaluate the full-wire-rate download throughput even for 1000Base-T interfaces, making it unnecessary to use the latest high-speed PCs as Gigabit services become more widespread in the future.



Built-in Basic Test Functions

Each of the connection check, ping and trace route, download throughput, and throughput functions both displays results as OK/NG and also provides result details. If a test returns a NG result, the built-in basic test functions can be used to pinpoint and troubleshoot the problem as quickly as possible.

To analyze hard-to-resolve connection-type problems, it is also possible to save protocol dump files on-site for later laboratory analysis by networking specialists.

Counter Measurement

Of course, it is also possible to effectively and visually monitor target frame receive rates, as well as packet and error counts to ensure that the network bandwidth is being used efficiently.

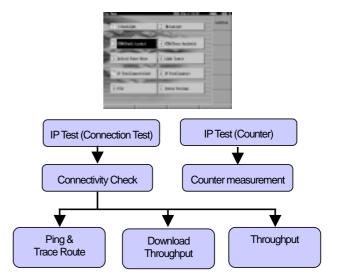
Built-in Auto MDI/MDI-X Functions

Built-in straight/cross cable auto-sensing eliminates worries about cabling types when running in-exchange tests and lightens the cabling preparation workload when performing evaluations.

Simple Measurement Procedures

The MT9080 Series ACCESS Master makes the work of IP network connection checks simple. The operator runs the connection tests (ping and trace route test, download throughput measurement, throughput measurement) and counter measurement procedures simply by selecting measurement items displayed at the function keys.

In addition, set measurement conditions can be saved in a file so that the next measurement can be performed easily and under the exact same conditions just by reading the saved file.



Specifications

Model	MT9080[]-001	MT9080[]-011
Name	IP Network Connection Check Function	Gigabit Ethernet Upgrade
Measurement IF	10BASE-T/100BASE-TX: 1 port	10BASE-T/100BASE-TX/1000BASE-T: 1port
IF Speed	10M/100M Full, 10M/100M Half, Auto negotiation	
Others	Auto MDI/MDI-X	
Connectivity Check		
Connection mode	PPPoE, DHCP, Manual	
VLAN	VLAN setup is possible in the DHCP Mode and Manual mode. Single VLAN tag is supported.	
VID	1 to 4094	
COS	0 to 7	
Check	OK / NG Judgment	
Connection Test	Can be executed after the connection is established by using the Connectivity Check function.	
Ping Test		
Number of times	1 to 999	
Timeout Threshold	1 to 60 s	
Trace Route Test		
Timeout Threshold	2 to 60 s	
Hops	1 to 255	
Download throughput	Can be performed after the connection is established by using the Connectivity Check function.	
measurement	The full wire rate is supported.	
Download file size	Up to 1 GB	
Download throughput value	Download file size [bits] / Download time [s]	
Throughput measurement	Can be performed after the connection is established by using the Connectivity Check function.	
Frame size	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.	
Transmit Rate	1 to 100% of the line band (100% at full-wire rate), in steps of 1%	
Transmit Duration Time	5, 10, 15, 20, 30, 60, 180, 300 s	
Resolution	1% or 5% of the line band	
Loss Tolerance	0, 0.01, 0.1, 1, 5, 10%	
Counter measurement		
Measurement time	1 to 720 min, in Steps of 1 min.	
Frame type	All frame, Only PPPoE frame, Only VLAN frame	

Ordaring Information

Model/Order No.	Name	
	ACCESS Master (main frame)	
MT9080A	SMF 1.31 um	
MT9080B	SMF 1.55 um	
MT9080C	SMF 1.65 um	
MT9080D	SMF 1.31/1.55 um	
MT9080E	SMF 1.55/1.65 um	
MT9080F	SMF 1.31/1.55/1.65 um	
	Standard accessories	
W2487AE	MT9080 Series operation manual (CD): 1copy	
SA165A-1250V-3	AC adapter:	1 pc
DR15SBA	Battery pack:	1 pc
	Software	
MX907600A	OTDR Emulation Software	
	Options ¹	
MT9080[]-001	IP Network Connection Check Function	
MT9080[]-011*2	Gigabit Ethernet Upgrade	
MT9080[]-201*3	IP Network Connection Check Function	
	Presently available options	
MT9080[]-211*3	Gigabit Ethernet Upgrade	
	Presently available options	
MT9080[]-02	Visible LD (Factory option)	
MT9080[]-04*4	Monochrome LCD	
MT9080[]-09*4	English language display	
MT9080[]-10	Protector (Factory option)	
MT9080[]-25 ^{*5}	FC-APC connector (Factory option)	
MT9080[]-26 ^{*5}	SC-APC connector (Factory option)	
MT9080[]-33*5	LC connector	
MT9080[]-37*5	FC connector	
MT9080[]-38*5	ST connector	
MT9080[]-39 ^{*5}	DIN connector	
MT9080[]-40*5	SC connector	
MT9080[]-43*5	HMS-10/A connector	

Model/Order No.	Name
	Application parts
W2462AE	MT9080 Series operation manual (print)
W2546AE*6	IP network connection check function manual (print)
B0547*7	Soft carrying case
B0548*8	Soft transit case
B0549	Hard carrying case
B0550*9	Front cover (For Option 10)
DR15SBA	Battery pack
Z0740	Battery charger (For DR15SBA)
J1270	Replaceable optical LC connector
J0617B	Replaceable optical FC connector
J0618D	Replaceable optical ST connector
J0618E	Replaceable optical DIN connector
J0618F	Replaceable optical HMS-10/A connector
J0619B	Replaceable optical SC connector
J0057	Optical adapter FC type
J0635[]*10	Optical fiber cord with FC-PC at both ends
	(SM, with FC-PC at both ends)
Z0282	Ferrule cleaner
Z0283	Ferrule cleaning tape (6 pcs/set)
Z0284	Adapter cleaner (Stick type, 200 pcs/set)

- *1: Installed in MT9080A/B/C/D/E/F
- $^{\star}2$: Added option for Option 001. Installation not supported for Option 011 only.
- *3: May not be supported depending on main-unit serial number (production date)
- *4: Please be sure to specify.
- *5: Specify the optical connector
- *6: Standard accessory with Option 001/011 factory shipment.
- *7: It can't use, when it equips with a protector (option 10)
- *8 : Attache case type [440 (W) x 310 (H) x 110 (D) mm]
- *9: Only front cover for option 10
- *10 : Specify the optical fiber length as A, B or C (A: 1m, B: 2m, C: 3m)



Specifications are subject to change without notice.



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