Anritsu envision : ensure

Network Master™ Series
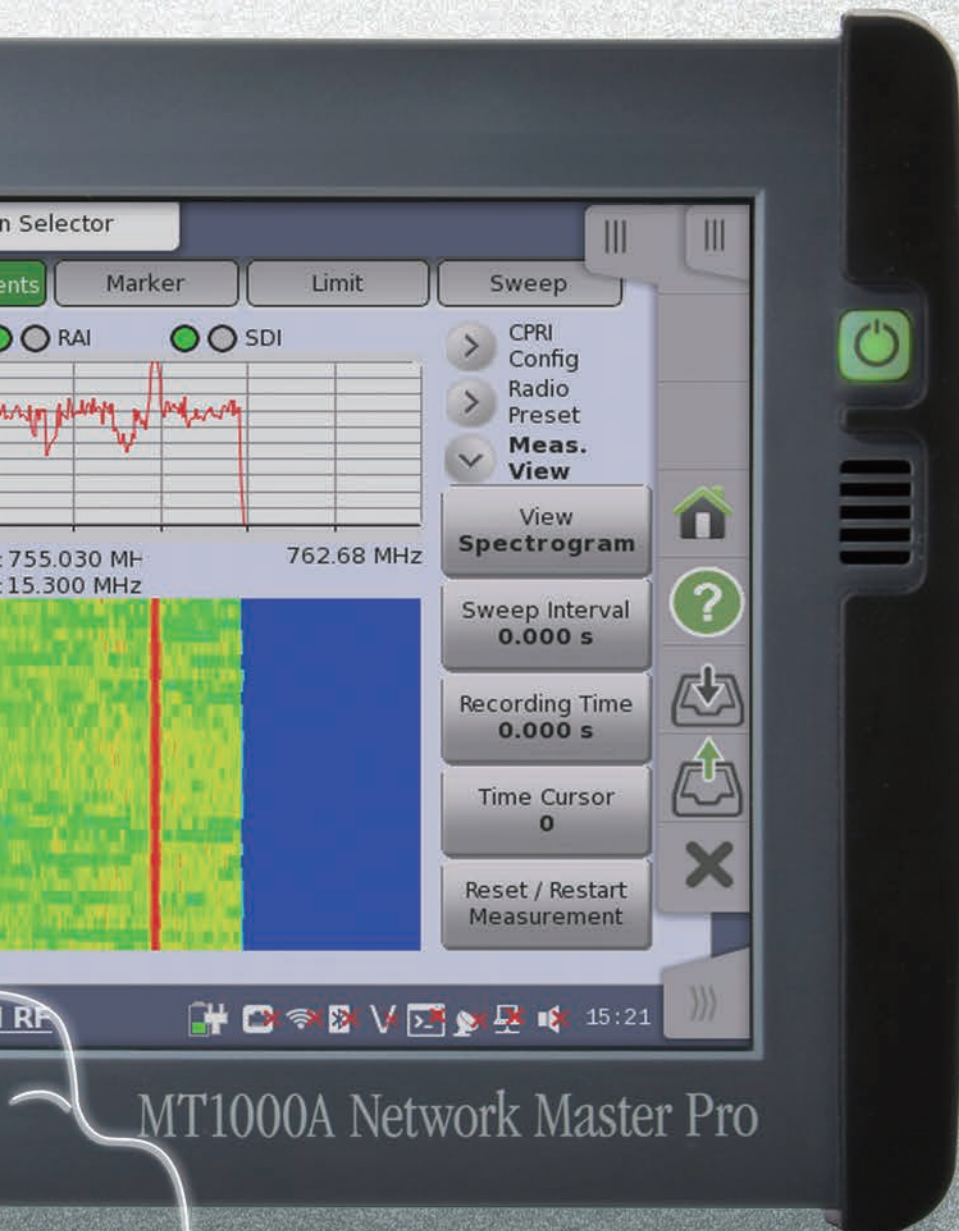
Network Master Pro MT1000A

10G Multirate Module	MU100010A
OTDR Module	MU100020A/MU100021A/MU100022A
CPRI RF Module	MU100040A
High Performance GPS Disciplined Oscillator	MU100090A

Network Master Pro

Excellent Eco Product

Smart All-in-One Optical and Data Measurements

n Selector

| ents | Marker | Limit | Sweep |

○ RAI   ● ○ SDI

> CPRI Config
> Radio Preset
⌄ **Meas. View**

: 755.030 MH   762.68 MHz
: 15.300 MHz

View
Spectrogram

Sweep Interval
0.000 s

Recording Time
0.000 s

Time Cursor
0

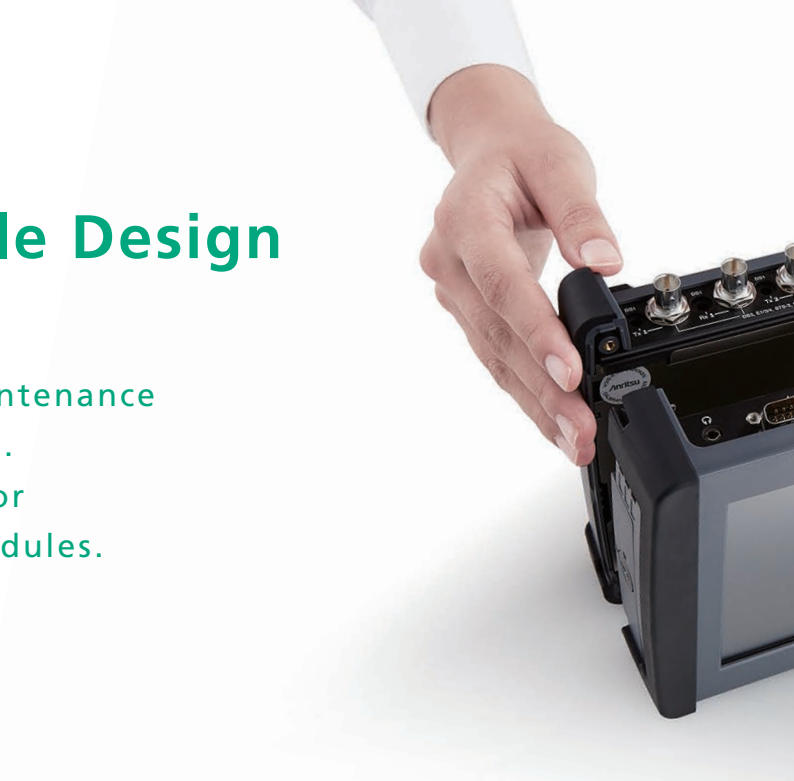Reset / Restart
Measurement

RF   15:21

MT1000A Network Master Pro

Actual Size

3

Leading-edge Module Design

Wired network installation and maintenance
must also evolve as networks evolve.
The MT1000A is customized easily for
every measurement by changing modules.

Network Master Pro (Main Frame) MT1000A

Easy to use   **All in One**   **I&M**

- All-in-one handheld MT1000A main unit test system
- Customized configuration supporting required functions

- Intuitive operation using touch screen
- Unified GUI for all tests

- Compact and lightweight (3.5 kg) with battery operation
- Up to 3 hours of continuous on-site operation

- Standalone Automatic Testing
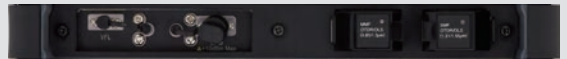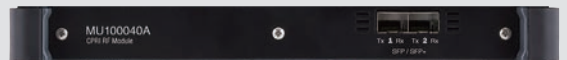- Fewer operation errors and easy Pass/Fail evaluations

+

10G Multirate Module
MU100010A

+

OTDR Module
MU100020A/MU100021A/MU100022A

+

CPRI RF Module
MU100040A

+

High Performance GPS Disciplined Oscillator
MU100090A

4

	FTTA/Mobile Fronthaul	Mobile Backhaul	Metro/Core Network

Supports communication networks up to 10G

OTN Ethernet · **TCP Throughput** · **Data Center**

- All-in-one Portable System
- Supports Ethernet, CPRI/OBSAI, OTN, SDH/SONET, PDH/DSn, Fibre Channel
- Dual-Receive at ALL Support Speeds
- Sharing one MU100010A by multi users

| ✔ | ✔ | ✔ | details p.6 |

Intuitive Fiber Status Monitoring

OTDR · **FTTA** · **Construction**

- Select of three modules
- 3 wavelength SM (1310/1550/1625 nm)
- 2 wavelength SM (1310 nm/1550 nm)
- SM/MM combo (1310 nm/1550 nm, 850 nm/1300 nm)
- Multi-pulse measurement
- Fiber Visualizer
- Graphical summary and Pass/Fail evaluation display

| ✔ | ✔ | ✔ | details p.7 |

Uplink and Downlink spectrum measurements for cell site deploying CPRI technology

CPRI · **Spectrum**

- Displays LTE spectrum of CPRI IQ data
- Fast update rate to capture intermittent interferers
- Auto Configuration of CPRI parameters
- Read and display Layer 2 alarms and SFP data

| ✔ | | | details p.6 |

Time Synchronization Measurement with GPS clock

SyncE · **PTP Network**

- 1PPS Signal phase measurement
- Measuring the phase difference the GPS signal and the network.
- PTP timestamp
- Measuring of OWD (One-Way-Delay)
- GPS Status Monitor

| | ✔ | | details p.6 |

Network Master Pro MT1000A Measurement Modules

10G Multirate Module MU100010A:
Flexible Support for Communications Networks up to 10G

OTN Ethernet | TCP Throughput | Data Center

The MU100010A has the functions and performance required for installation and maintenance of communications networks with speeds ranging from 1.5 Mbps to 10 Gbps. Moreover, since each function is available as an option, supported functions can be customized and expanded according to the work schedule, helping cut up-front deployment costs.

- All-in-one Portable System
    - Supports CPRI/OBSAI, Ethernet, OTN, SDH/SONET, PDH/DSn, Fibre Channel
- Mobile Fronthaul Commissioning and Inspection
    - BER tests using CPRI/OBSAI interface, Error/Alarm tests, Return Delay Time tests, Link Status checks, CPRI over OTN connection checks
- Mobile Backhaul Commissioning and Inspection
    - Synchronous Ethernet (SyncE) ITU-T G.826x, PTP (IEEE 1588 v2) tests and analyses
- Commissioning and Troubleshooting Carrier Access Networks
    - Ethernet tests up to 10 Gbps, including RFC 2544, RFC 6349, and Y.1564
    - Frame Capture Function for fast troubleshooting
- Metro and Core Network Commissioning and Maintenance
    - Supports OTN up to OTU2 and multistage mapping for fast easy testing of SDH/SONET and PDH/DSn networks
- Full Multi-user Remote Operation using free MX100001A Software
    - Independent ports for simultaneous multi-user access to one MT1000A


Measurement Results Screen
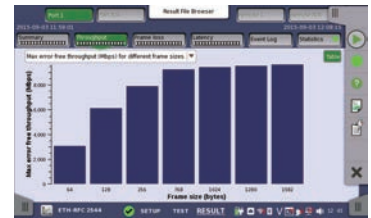
Test Execution Screen Throughput Report

High Performance GPS Disciplined Oscillator MU100090A:
Commissioning and Verifying Mobile Backhaul

SyncE | PTP Network

The MU100090A uses rubidium oscillator with has high holdover performance due to high stability, keeping absolute phase of the ToD for a long time after losing GPS signal.

- PTP Commissioning Test
    - MU100090A is located at the service demarcation point between the MBH and mobile service, and used to confirm the backhaul is compliant to the SLA.
    - MU100090A is able to emulate a base station as a PTP slave clock.
    - MU100090A measures max|TE| (absolute Time Error), cTE (Constant Time Error) and dTE (Dynamic Time Error) as metrics of phase/time synchronization.
- Protocol Test
    - After PTP session is established the tester shows a variety of status announced from the network and measures message rate.
    - This information is used as criteria to check if the network is working properly at the construction sites.
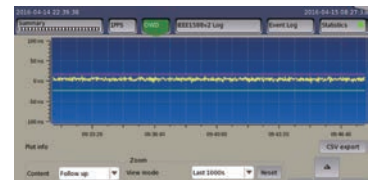

One Way Delay Result


1PPS Phase Error and Deviation

CPRI RF Module MU100040A:
Fast Interference Monitoring of LTE Uplink Spectrum

CPRI | Spectrum

The MU100040A CPRI RF module enables the display of the LTE spectrum of both downlink and uplink signals on a cell site IQ data using CPRI technology between the Baseband Unit (BBU) and Remote Radio Head (RRH). A fast trace update rate ensures that even intermittent interferers are seen, and the use of Max Hold and Min Hold traces captures these events for simplified detection. When an interferer has been identified, it is possible to center this signal and zoom into it for more detailed analysis, further facilitating the identification of the source. The spectrogram maintains a history of all traces over an extended time period for long term monitoring.
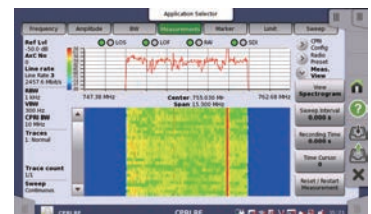


Spectrogram
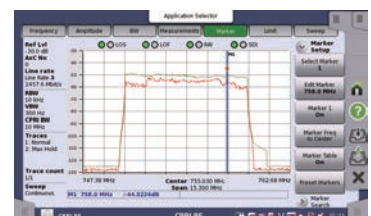
Marker to interferer

Network Master Pro MT1000A Measurement Modules

OTDR Module MU100020A/MU100021A/MU100022A: At-a-glance Confirmation of Cable Status


Fiber Visualizer

The MU100020A/MU100021A/MU100022A offers strengthened support for troubleshooting mobile optical cable faults, such as detection and display of damaged and dirty connectors at optical connections, as well as excessive optical return losses and line faults. In addition, the easy-to-use Fiber Visualizer function supporting easy report creation greatly improving work efficiency.

- All-in-One Built-in OTDR, Light Source, Optical Power Meter (Standard), and Visible Light Source (Option) Functions
  - Fiber Visualizer display graphical summary of fiber status and Pass/Fail evaluation results
  - The touch screen supports OTDR simple test mode operation and one-button output of PDF reports.
    - Actual trace event displayed with ability to quickly switch between the Trace view and Visualizer view
- I&M of Long-Distance Core and Metro Networks
  - Measures optical fibers exceeding 100 km and PON networks with 1 × 128 splitters max.
  - Three (Standard, Enhanced and High-Performance) models support SM fiber (1310 nm/1550 nm)
  - High dynamic range 3 wavelength SM 1310 nm 1550 nm 1625 nm model
- Mobile Network I&M
  - Measures mobile fronthaul and backhaul optical loss and return loss with hybrid models supporting both
  - SM (1310 nm/1550 nm) and MM (850 nm/1300 nm) fibers
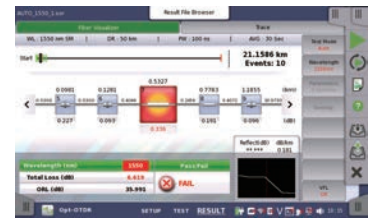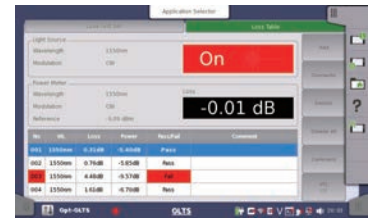
OLTS

Value of Offering Automatic Measurement Solutions
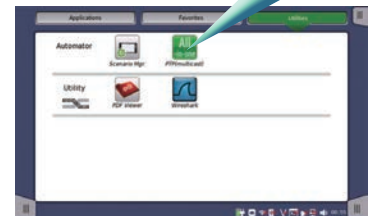

Automation Test Select

Simplifies multiple testing work, shortens on-site test time, and eliminates human operation errors. Supports simultaneous multiple tests.

- Increased Onsite Work Efficiency
  - Both predefined test steps and test times are cut
  - Mistakes due to human error are reduced
  - Tests can be run and results evaluated regardless of the operator's background knowledge about the test contents
- Easy and Customized Test Automation
  - Automatic work scenarios can be created intuitively using the GUI-based editor function
  - Introduction of a scripting language supports detailed and customized test Pass/Fail definitions
  - The contents during testing and the test contents after starting operation can be changed

Download free editing software (MX100003A) to create scenarios without need for programing skills.
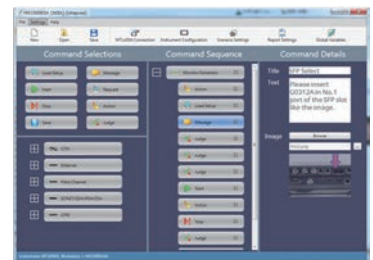
SEEK (Scenario Edit Environment Kit) MX100003A

SkyBridge Tools™ Test Manager

SkyBridge Tools™ is a cloud-hosted management system for test equipment and trace management. Support for one-button testing cuts test times by up to 90% by simplifying procedures and eliminating errors. SkyBridge also reduces engineering involvement, provides immediate project visibility to all involved with clear visibility of results through dashboards and output of report-friendly results in multiple formats. SkyBridge supports the Network Master Pro (MT1000A) OTDR module with automated test plans; it creates OTDR measurement scenarios for Pass/Fail evaluation and outputs result reports.

Network Master Pro MT1000A

Data Networks Supporting Modern Social Infrastructure

Access Network

More Mobile Connections

RRH

Mobile Fronthaul/Mobile Backhaul

LTE

BBU

LTE

CPRI

Centralized RAN

More 10G Ports Increasing Infrastructure Costs

WiFi

B S

PON/WDM-PON

FTTx

More Mobile Access

BBU
BBU
BBU

Aggregated BBUs
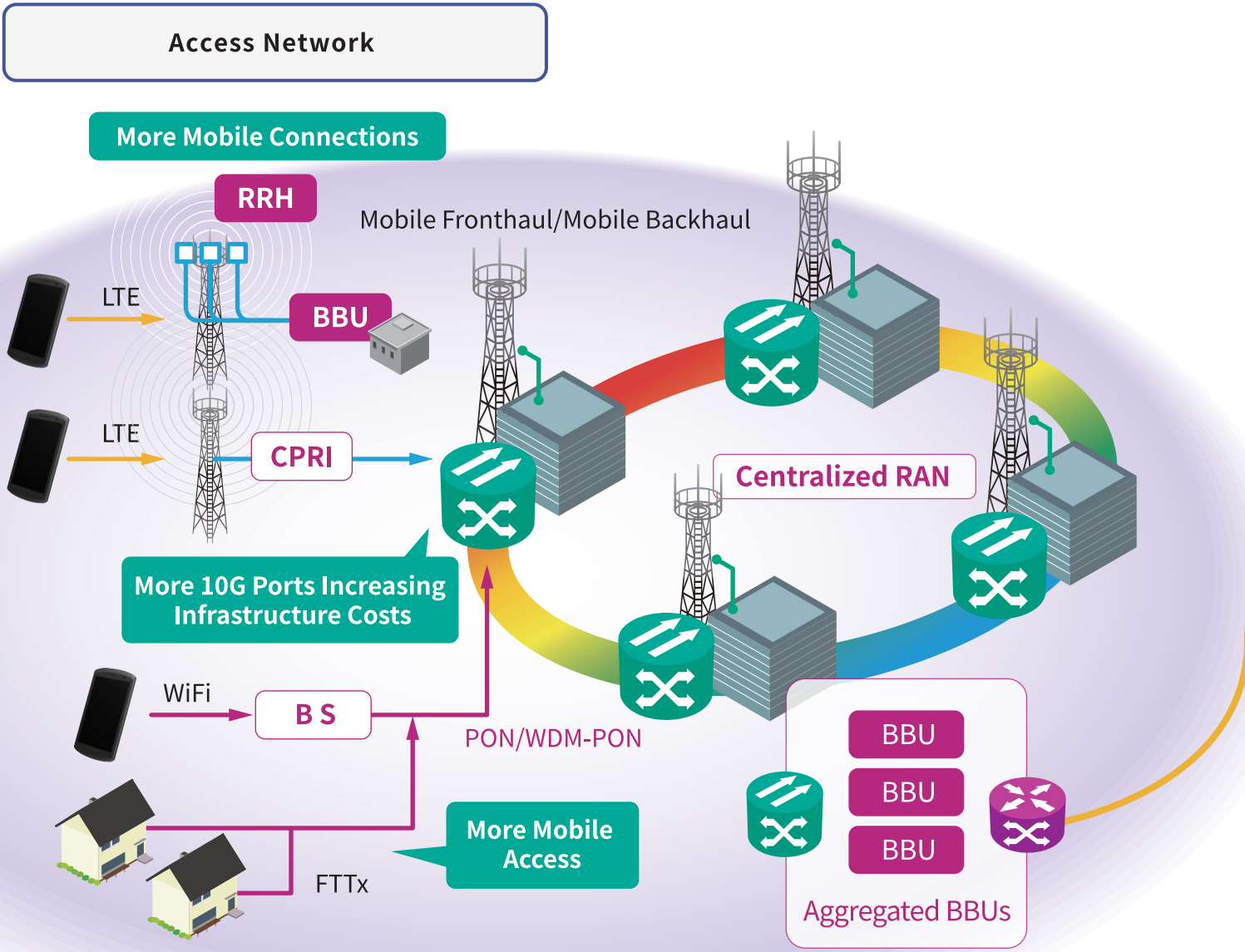
Access Network Trends

Mobile Fronthaul
- Area expansion using small cells
- Faster CPRI by spreading LTE service

FTTx
- Traffic increases due to more connected devices

Mobile Backhaul
- Speed increases from 1G to 10G
- SyncE and PTP rollout
- Network configuration using WDM
- Network moving to Ethernet and CPRI over OTN

Metro and Core Network Trends

Future Issues

Expansion of carrier Ethernet
- Expansion of line quality guarantee services such as VLAN, Q-in-Q, etc.

Capacity and Speed
- Addition of 100G/400G Ethernet
- Expansion of OTN and WDM networks

Metro and Core Networks

Metro・Core: 10G/100G OTN

Addition of 100G OTN networks

Increasing Bandwidth and Higher Efficiency 10G OTN

Data Center

Ethernet Switch

10GbE

Flexible Configuration (SDN/NFV)

TDM Transponder

Macrocell

OTN/SDH/SONET

DS1/DS3, E1/E2/E3
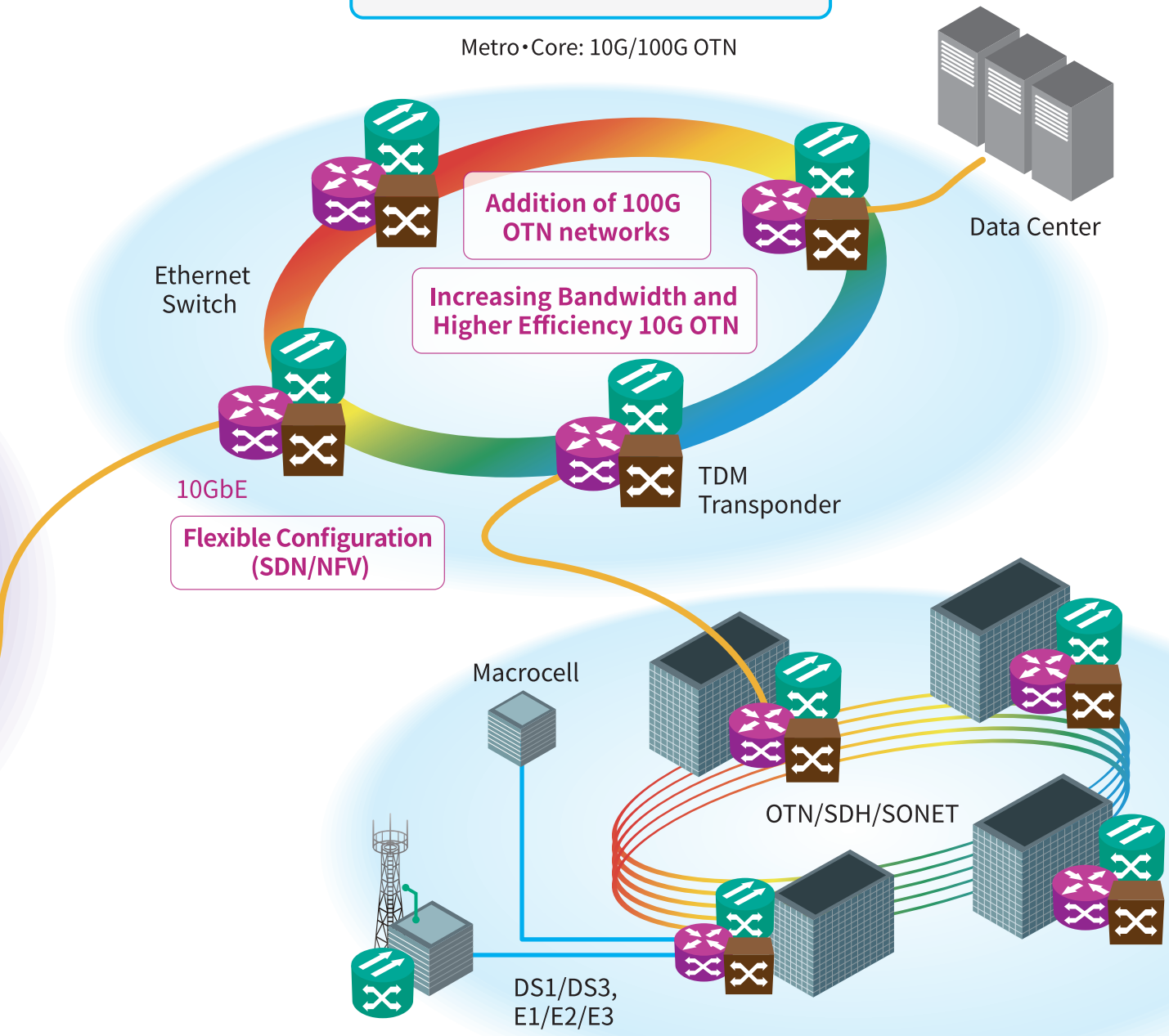
Issues

- Difficult fault troubleshooting on shared optical cable
- Difficult network commissioning inspect due to network complexity
- Densely crowded optical and electrical interfaces
- Multiple measuring instruments required for network commissioning
- Changing test procedures and longer training times as evaluation targets increase

Solutions

Improved I&M using MT1000A

- All-in-one multi platform Optical Cable, CPRI RF spectrum and Data Transport I&M measuring instrument
- Same basic measurement procedure despite increasing test procedures
- Instant results sharing using remote function
- More one-touch operations for smooth on-site operation

Network Master Pro MT1000A 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.

MT1000A Mainframe

Model/Order No.	Name	
MT1000A	Network Master Pro	
Standard Accessories		
	Line Code*1:	1 pc
B0690A	Softbag:	1 pc
B0728A*2	Rear Panel kit:	1 pc
G0309A	AC Adapter:	1 pc
G0310A	Li-ion Battery:	1 pc
Z1746A	Stylus:	1 pc
Z1747A*3	Carrying Strap:	1 pc
Z1748A*4	Handle:	1 pc
Z1817A*5	Utilities ROM:	1 pc
Option		
MT1000A-003*6	Connectivity for WLAN/*Bluetooth*	
MT1000A-005*7	AUX I/O	

Model/Order No.	Name
Optional Accessories	
B0691B*8	Hard Case
B0720A	Rear Cover
B0729A*9	Screw 1U
B0730A*9	Screw 2U
B0731A*9	Screw 3U
B0732A*10	Screw Kit
G0306B	Video Inspection Probe
G0324A	Battery Charger
G0325A	GPS Receiver
J1569A	Car 12 Vdc Adapter
J1667A*11	GPIB–USB Converter

Maintenance Service

Model/Order No.	Name
MT1000A-ES210	2 Years Extended Warranty Service
MT1000A-ES310	3 Years Extended Warranty Service
MT1000A-ES510	5 Years Extended Warranty Service

Module Configuration*12

*1: One line cord is attached to the area to shipment.
*2: Set of B0720A (Rear Panel) and B0732A (Screw Set). Please refer to following "Module Configuration" for details.
*3: Shoulder strap for MT1000A.
*4: Hand strap for MT1000A.
*5: DVD ROM containing operation manual, remote script instruction manual, etc.
*6: Available for certified countries and regions including USA, Canada, Japan and EU countries. Please contact Anritsu for updated information.
*7: Required to carry MU100090A. MT1000A-205 is a retrofit option.
*8: The MT1000A with up to two installed modules.
*9: Includes 4 bolts of same length.
*10: Set of B0729A, B0730A and B0731A. Four bolts of each length for 12 bolts total.
*11: J1667A is required for SCPI remote control via GPIB.
*12: Any modular combination as shown in a figure.
*13: Required if the MU100010A module (10G transport) is not used rear cover.

Network Master Pro MT1000A Ordering Information

Transport Module MU100010A/MU100090A

10G Multirate Module MU100010A

Model/Order No.	Name
MU100010A	10G Multirate Module
Standard Accessories	
W3681AE	MT1000A/MU100010A Quick Reference Guide: 1 pc
B0692A*1	ESD Box (for optical modules): 1 pc
Operation Manuals	
W3682AE	MT1000A/MU100010A Operation Manual (Printed version)
Z1821A*2	Utilities in USB Stick

*1: Up to four SFP+/SFPs can be stored.
*2: Include MT1000A Operation Manual and the Remote Script Manual.

Options*3

Model/Order No.	Name
Low Rate	
MU100010A-001*4	Up to 2.7G Dual Channel
Ethernet	
MU100010A-011*5	Ethernet 10G Single Channel
MU100010A-012*5	Ethernet 10G Dual Channel
MU100010A-020*6	TCP Throughput
OTN	
MU100010A-051*7	OTN 10G Single Channel
MU100010A-052*7	OTN 10G Dual Channel
MU100010A-061*8	ODU Multiplexing
MU100010A-062*9	ODU Flex
CPRI/OBSAI	
MU100010A-071	CPRI/OBSAI Up to 5G Dual Channel
MU100010A-072*10	CPRI/OBSAI 6G to 10G Single Channel
MU100010A-073*10	CPRI/OBSAI 6G to 10G Dual Channel
SDH/SONET	
MU100010A-081*11	STM-64 OC-192 Single Channel
MU100010A-082*11	STM-64 OC-192 Dual Channel
Fiber Channel	
MU100010A-002	FC 1G 2G 4G Dual Channel
MU100010A-091*12	FC 8G 10G Single Channel
MU100010A-092*12	FC 8G 10G Dual Channel

*3: This option can be retrofitted.
   The Model/Order No. of retrofit option is "-3** ".
   Example
   As a retrofit, MU100010A-001 Up to 2.7G Dual Channel becomes
   MU100010A-301 Up to 2.7G Dual Channel Retrofit. In addition, specify
   one of the following media along with the required option.

Model/Order No.	Name
Z1849A	DVD-ROM for Retrofit Options
Z1850A	USB Stick for Retrofit Options

*4: Includes OTN (OTU1), Ethernet (10 Mbps, 100 Mbps, 1 Gbps), SDH up to
   STM-16, SONET up to OC-48, PDH (E1, E3, E4), and DSn (DS1, DS3)
*5: MU100010A-011, MU100010A-012: Only one of these options can be installed.
*6: MU100010A-020: Requires that at least one of the following options is
   installed: MU100010A-001, MU100010A-011, MU100010A-012
*7: MU100010A-051, MU100010A-052: Only one of these options can be installed.
*8: MU100010A-061: Requires that at least one of the following options is
   installed: MU100010A-001, MU100010A-051, MU100010A-052
*9: MU100010A-062: Requires that at least one of the following options is
   installed: MU100010A-001, MU100010A-051, MU100010A-052
*10: MU100010A-072, MU100010A-073: Only one of these options can be installed.
*11: MU100010A-081, MU100010A-082: Only one of these options can be installed.
*12: MU100010A-091, MU100010A-092: Only one of these options can be installed.

Maintenance Service

Model/Order No.	Name
MU100010A-ES210	2 Years Extended Warranty Service
MU100010A-ES310	3 Years Extended Warranty Service
MU100010A-ES510	5 Years Extended Warranty Service

High Performance GPS Disciplined Oscillator MU100090A

Model/Order No.	Name
MU100090A*13	High Performance GPS Disciplined Oscillator
Standard Accessories	
J1705A	AUX Conversion Adaptor
J1706A	GPS Antenna
J1710A	BNC Cable (20 cm) × 2

*13: Excellent Eco Product non-compliant.
    MU100090A module requires the MT1000A-005 installed on the
    MT1000A mainframe.

Maintenance Service

Model/Order No.	Name
MU100090A-ES210	2 Years Extended Warranty Service
MU100090A-ES310	3 Years Extended Warranty Service
MU100090A-ES510	5 Years Extended Warranty Service

Optional Accessories for Transport Module

Model/Order No.	Name
Optical Module For MU100010A	
G0332A	100M FX 1310 nm MM SFP
G0329A	10G LR 1310 nm SFP+
G0315A	10G LR/LW 1310 nm SFP+
G0316A	10G ER/EW 1550 nm 40 km SFP+
G0318A	10G ZR/ZW 1550 nm 80 km SFP+
G0319A	Up to 2.7G 1310 nm 15 km SFP
G0320A	Up to 2.7G 1310 nm 40 km SFP
G0321A	Up to 2.7G 1550 nm 80 km SFP
G0328A	1G/2G/4G FC 850 nm SFP
G0322A	1G/2G/4G FC 1310 nm SFP
G0323A	1G/2G/4G FC 1550 nm SFP
G0356A	8G FC/10G SR 850 nm SFP+
Cables	
J1571A	Optical Cable SM LC/PC to SC/PC 3 m
J1575A	Optical Cable SM LC/PC to FC/PC 3 m
J1579A	Optical Cable SM LC/PC to LC/PC 3 m
J1581A	Optical Cable MM LC/PC to LC/PC 3 m
J1583A	Optical Attenuator 10 dB LC/PC to LC/PC
J1584A	RJ45 Cable 3 m
J1585A*14	RJ48 to Crocodile Clips Cable 3 m
J1586A*14	RJ48 to Crocodile Clips Cable 20 dB ATT 3 m
J1588A*15	BNC Cable 2.5 m
J1589A*15	BNC to 1.6/5.6 Cable 2.5 m
J1591A*14	RJ48 to Two 3-pin Banana Plug Cable 2.5 m
J1597A*14	RJ48 Balanced PDH Cable Crossed 3 m
J1598A*16	Bantam Cable 3 m
J1710A*17	BNC Cable 0.2 m
J0127B*17	COAXIAL CORD, 2.0 M

*14: E1 interface cable.
*15: E1, E3, E4, DS3, STM-1e, STS-3 interface cable. Impedance: 75Ω
*16: DS1 interface cable.
*17: 50Ω impedance cable for MU100090A and main-frame external clock
    input connector

Network Master Pro MT1000A Ordering Information

OTDR Module MU100020A/MU100021A/MU100022A

Select a module polish type and connector adapter according to the procedures in items 1) to 6).

1) Select Base Module

Model/Order No.	Name
MU100020A	OTDR Module 1310/1550 nm SMF
Standard Accessories	
J1693A	Universal Connector 2.5 mm for OPM
J1694A	Universal Connector 1.25 mm for OPM
W3811AE	Quick Reference Guide

Model/Order No.	Name
MU100021A	OTDR Module 1310/1550/850/1300 nm SMF/MMF
Standard Accessories	
J1693A	Universal Connector 2.5 mm for OPM
J1694A	Universal Connector 1.25 mm for OPM
W3811AE	Quick Reference Guide

Model/Order No.	Name
MU100022A	OTDR Module 1310/1550/1625 nm SMF
Standard Accessories	
J1693A	Universal Connector 2.5 mm for OPM
J1694A	Universal Connector 1.25 mm for OPM
W3811AE	Quick Reference Guide

2) Select Dynamic Range Type[1]

Select one of the following models.

Model/Order No.	Name	Supported Modules
MU100020A-020	Standard Dynamic Range (1310/1550 nm: 39/37.5 dB)	MU100020A
MU100020A-021	Enhanced Dynamic Range (1310/1550 nm: 42/41 dB)	
MU100020A-022	High-Performance Dynamic Range (1310/1550 nm: 46/46 dB)	
MU100021A-021	Enhanced Dynamic Range (1310/1550/850/1300 nm: 42/41/29/28 dB)	MU100021A
MU100022A-022	High-Performance Dynamic Range (1310/1550/1625 nm: 46/46/44 dB)	MU100022A

*1: Factory installed option only and cannot be retrofitted.

3) Select Connector Types

Select a module polish type and connector adapter according to the procedures in items a) and b).

a) Polish Types[2]

Specify one connector polish type.

Model/Order No.	Name	Supported Modules
MU100020A-010	UPC Polish	MU100020A
MU100020A-011	APC Polish	
MU100021A-010	UPC Polish	MU100021A
MU100021A-011*3	APC Polish	
MU100022A-010	UPC Polish	MU100022A
MU100022A-011*3	APC Polish	

*2: Factory installed option only and cannot be retrofitted.
*3: Used by SM port. An APC connector cannot be specified for the MM port, which uses a UPC connector.

b) Select Connector Adapter type

Specify one type of connector adapter.

Model/Order No.	Name	Supported Modules
For UPC Polish with Option 010		
MU100020A-037*4	FC Connector	MU100020A
MU100020A-039*4	DIN 47256 Connector	
MU100020A-040*4	SC Connector	
MU100021A-037*5	FC Connector	MU100021A
MU100021A-039*5	DIN 47256 Connector	
MU100021A-040*5	SC Connector	
MU100022A-037*4	FC Connector	MU100022A
MU100022A-039*4	DIN 47256 Connector	
MU100022A-040*4	SC Connector	
For APC Polish with Option 011		
MU100020A-025*4	FC Connector key width 2.0 mm	MU100020A
MU100020A-026*4	SC Connector	
MU100021A-025*6	FC Connector key width 2.0 mm	MU100021A
MU100021A-026*7	SC Connector	
MU100022A-025*6	FC Connector key width 2.0 mm	MU100022A
MU100022A-026*7	SC Connector	

*4: One specified connector adapter supplied free of charge.
*5: One each of same connector adapter for SM port and MM port supplied free of charge. Cannot specify different connector adapters for each port.
*6: One connector adapter for SM port supplied free of charge. One connector adapter equivalent to Option 37 (FC/UPC) for MM port supplied free of charge.
*7: One specified connector adapter for SM port supplied free of charge. One connector adapter equivalent to Option 40 (SC/UPC) for MM port supplied free of charge.

Network Master Pro MT1000A Ordering Information

4) VFL*8, *9

Model/Order No.	Name	Supported Modules
MU100020A-002	Visual Fault Locator	MU100020A
MU100021A-002	Visual Fault Locator	MU100021A
MU100022A-002	Visual Fault Locator	MU100022A

*8: Factory installed option only and cannot be retrofitted.
*9: Installs dedicated port for visible light source; 2.5 mm fiber connector.
　　J1335A required to connect 1.25 mm fiber.

5) Replacement Adapters

Model/Order No.	MU100020A	MU100021A		MU100022A
For UPC Polish				
	SM port	SM port	MM port	SM port
J0617B (FC/UPC)	✓	✓	✓	✓
J0618E (DIN/UPC)	✓	✓	✓	✓
J0619B (SC/UPC)	✓	✓	✓	✓
For APC Polish				
	SM port	SM port	MM port	SM port
J0739A (FC/APC)	✓	✓	N/A	✓
J1697A (SC/APC)	✓	✓	N/A	✓

6) Maintenance Service

Model/Order No.	Name	Supported Modules
MU100020A-ES210	2 Years Extended Warranty Service	MU100020A
MU100020A-ES310	3 Years Extended Warranty Service	
MU100020A-ES510	5 Years Extended Warranty Service	
MU100021A-ES210	2 Years Extended Warranty Service	MU100021A
MU100021A-ES310	3 Years Extended Warranty Service	
MU100021A-ES510	5 Years Extended Warranty Service	
MU100022A-ES210	2 Years Extended Warranty Service	MU100022A
MU100022A-ES310	3 Years Extended Warranty Service	
MU100022A-ES510	5 Years Extended Warranty Service	

Optional Accessories for OTDR Modules

Model/Order No.	Name
W3810AE	MT1000A MU100020A Network Master Pro Operation Manual (Printed version)
J1335A	MU/LC Connector Adapter Converts ferrule connector diameter from 2.5 mm → 1.25 mm for visible light source (Option 002)
J1530A	SC Plug-in Converter (UPC(P)-APC(J)) (SC/UPC → SC/APC Adapter)
J1531A	SC Plug-in Converter (APC(P)-UPC(J)) (SC/APC → SC/UPC Adapter)
J1532A	FC Plug-in Converter (UPC(P)-APC(J)) (FC/UPC → FC/APC Adapter)
J1533A	FC Plug-in Converter (APC(P)-UPC(J)) (FC/APC → FC/UPC Adapter)
J1534A	LC-SC Plug-in Converter (for SM, SC(P)-LC(J)) (SC/UPC → LC/UPC Adapter for SM fiber)
J1535A	LC-SC Plug-in Converter (for MM, SC(P)-LC(J)) (SC/UPC → LC/UPC Adapter for MM fiber)
NETWORKS	Reporting Software (Microsoft Windows 7)

CPRI RF Module MU100040A

Model/Order No.	Name
MU100040A*¹	CPRI RF Module
Option	
MU100040A-001	CPRI LTE RF Measurements
Optional CPRI Accessories	
67-12-R	80/20 Optical Tap; Single Mode/Multi Mode
67-13-R	80/20 Optical Tap; Single Mode
67-14-R	50/50 Optical Tap; Single Mode/Multi Mode
67-15-R	50/50 Optical Tap; Single Mode
68-5-R	SFP (Optical Module), 4.25G, 850 nm, 500 m
68-6-R	SFP+ (Optical Module), 8G FC/10G SR 850 nm
68-7-R	SFP (Optical Module), 2.7G, 1310 nm, 15 km
68-8-R	SFP+ (Optical Module), 10G LR, 1310 nm
68-9-R	SFP (Optical Module), 3.07 Gbps SFP, 1310 nm
68-10-R	SFP (Optical Module), 3.7 Gbps SFP, 850 nm
68-11-R	SFP (Optical Module), 10.5 Gbps SFP+, 1310 nm
68-12-R	SFP (Optical Module), 10.5 Gbps SFP+, 850 nm
2100-29-R	Fiber Optic Cable, 3 m, LC/UPC, Single Mode (SM), Simplex
2100-30-R	Fiber Optic Cable,10 m, LC-SC, Multi Mode (MM), Simplex
2100-31-R	Fiber Optic Cable, 3 m, LC/UPC, Single Mode (SM), Duplex
971-14-R	Ferrule Cleaner, 2.5 mm SC
971-15-R	Ferrule Cleaner, 1.25 mm LC
971-16	Fiber Ferrule Cleaner
808-16-R	3 m, DUPLEX, MM, LC-LC
808-17-R	3 m, SIMPLEX, MM, LC-LC
2000-1849-R	ESD Box
760-286-R	Compact Transit Case with Wheels and Handle [556 (W) × 355 (H) × 229 (D) mm]
Operation Manuals	
10580-00423	MT1000A/MU100040A Network Master CPRI Analyzer
Z1821A*²	Utilities on USB device

*1: Excellent Eco Product non-compliant.
*2: Includes MT1000A Operation Manual and the Remote Script Manual.

Maintenance Service

Model/Order No.	Name
MU100040A-ES210	2 Years Extended Warranty Service
MU100040A-ES310	3 Years Extended Warranty Service
MU100040A-ES510	5 Years Extended Warranty Service

Cloud-hosted System

Model/Order No.	Name
MX002001B-TL101*³	Anritsu SkyBridge Tools

*3: This product provides one license for up to 5 instruments for 1 year.

Network Master Pro MT1000A Ordering Information

Network Master Pro MT1000A Optical Transceivers

Model	Name	Form Factor	100 Meg Ethernet	156 Meg STM-1	614 Meg CPRI	622 Meg STM-4	768 Meg OBSAI	1 Gig FC	1.23 Gig CPRI	1.25 Gig Ethernet	1.54 Gig OBSAI	2 Gig FC	2.46 Gig CPRI	2.488 Gig STM-16	2.67 Gig OTU1	3.07 Gig CPRI OBSAI	4 Gig FC	4.92 Gig CPRI	6.14 Gig CPRI OBSAI	8 Gig FC	9.83 Gig CPRI	9.95 Gig STM-64	10.1 Gig CPRI	10.3 Gig Ethernet	10.5 Gig FC	10.7 Gig OTU2	11.05 Gig OTU1e	11.09 Gig OTU2e	11.27 Gig OTU1f	11.3 Gig OTU2f
G0332A	100M FX 1310 nm MM SFP	SFP	1310 nm, MM, 2 km																											
G0329A	10G LR 1310 nm SFP+	SFP+								●	●	●	●	●		●	●	●	●	●			1310 nm, SM, 10 km	●			●	●	●	●
G0315A	10G LR/LW 1310 nm SFP+	SFP+																			1310 nm, SM, 10 km	●	●	●	●	●	●	●	●	●
G0316A	10G ER/EW 1550 nm 40 km SFP+	SFP+																			1550 nm, SM, 40 km	●	●	●	●	●	●	●	●	●
G0318A	10G ZR/ZW 1550 nm 80 km SFP+	SFP+																			1550 nm, SM, 80 km	●	●	●	●	●	●	●	●	●
G0319A	Up to 2.7G 1310 nm 15 km SFP	SFP		1310 nm, SM, 15 km	●	●	●	●	●	●	●	●	●	●	●															
G0320A	Up to 2.7G 1310 nm 40 km SFP	SFP		1310 nm, SM, 40 km	●	●	●	●	●	●	●	●	●	●	●															
G0321A	Up to 2.7G 1550 nm 80 km SFP	SFP		1550 nm, SM, 80 km	●	●	●	●	●	●	●	●	●	●	●															
G0328A	1G/2G/4G FC 850 nm SFP	SFP						850 nm, MM, 0.5 km	●	●	●	●	●				●													
G0322A	1G/2G/4G FC 1310 nm SFP	SFP						1310 nm, SM, 10 km	●	●	●	●	●				●													
G0323A	1G/2G/4G FC 1550 nm SFP	SFP						1550 nm, SM, 40 km	●	●	●	●	●				●													
G0356A	8G FC/10G SR 850 nm SFP+	SFP+																		850 nm, MM, 0.3 km			●	●	●					
68-7-R	SFP (Optical Module), 2.7G, 1310 nm, 15 km	SFP											●																	
68-10-R	SFP (Optical Module), 3.7 Gbps SFP, 850 nm	SFP														●														
68-9-R	SFP (Optical Module), 3.07 Gbps SFP, 1310 nm	SFP														●														
68-5-R	SFP (Optical Module), 4.25G, 850 nm, 500 m	SFP																●												
68-12-R	SFP (Optical Module), 10.5 Gbps SFP+, 850 nm	SFP																					●							
68-11-R	SFP (Optical Module), 10.5 Gbps SFP+, 1310 nm	SFP																					●							
68-6-R	SFP+ (Optical Module), 8G FC/10G SR 850 nm	SFP+																		●			●							
68-8-R	SFP+ (Optical Module), 10G LR, 1310 nm	SFP+																					●							

Anritsu envision : ensure

● **United States**
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 Eletronica Ltda.
Praça Amadeu Amaral, 27 - 1 Andar
01327-010 - Bela Vista - Sao Paulo - SP
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

● **United Kingdom**
Anritsu EMEA Ltd.
200 Capability Green, Luton, Bedfordshire, LU1 3LU, U.K.
Phone: +44-1582-433200
Fax: +44-1582-731303

● **France**
Anritsu S.A.
12 avenue du Québec, Bâtiment Iris 1- Silic 612,
91140 VILLEBON SUR YVETTE, 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.r.l.
Via Elio Vittorini 129, 00144 Roma, Italy
Phone: +39-6-509-9711
Fax: +39-6-502-2425

● **Sweden**
Anritsu AB
Kistagången 20B, 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
Kay Fiskers Plads 9, 2300 Copenhagen S, Denmark
Phone: +45-7211-2200
Fax: +45-7211-2210

● **Russia**
Anritsu EMEA Ltd.
Representation Office in Russia
Tverskaya str. 16/2, bld. 1, 7th floor.
Moscow, 125009, Russia
Phone: +7-495-363-1694
Fax: +7-495-935-8962

● **Spain**
Anritsu EMEA Ltd.
Representation Office in Spain
Edificio Cuzco IV, Po. de la Castellana, 141, Pta. 5
28046, Madrid, Spain
Phone: +34-915-726-761
Fax: +34-915-726-621

● **United Arab Emirates**
Anritsu EMEA Ltd.
Dubai Liaison Office
902, Aurora Tower,
P O Box: 500311- Dubai Internet City
Dubai, United Arab Emirates
Phone: +971-4-3758479
Fax: +971-4-4249036

● **India**
Anritsu India Private Limited
2nd & 3rd Floor, #837/1, Binnamangla 1st Stage,
Indiranagar, 100ft Road, Bangalore - 560038, India
Phone: +91-80-4058-1300
Fax: +91-80-4058-1301

● **Singapore**
Anritsu Pte. Ltd.
11 Chang Charn Road, #04-01, Shriro House
Singapore 159640
Phone: +65-6282-2400
Fax: +65-6282-2533

● **P.R. China (Shanghai)**
Anritsu (China) Co., Ltd.
Room 2701-2705, Tower A,
New Caohejing International Business Center
No. 391 Gui Ping Road Shanghai, 200233, P.R. China
Phone: +86-21-6237-0898
Fax: +86-21-6237-0899

● **P.R. China (Hong Kong)**
Anritsu Company Ltd.
Unit 1006-7, 10/F., Greenfield Tower, Concordia Plaza,
No. 1 Science Museum Road, Tsim Sha Tsui East,
Kowloon, Hong Kong, P.R. China
Phone: +852-2301-4980
Fax: +852-2301-3545

● **Japan**
Anritsu Corporation
8-5, Tamura-cho, Atsugi-shi, Kanagawa, 243-0016 Japan
Phone: +81-46-296-6509
Fax: +81-46-225-8359

● **Korea**
Anritsu Corporation, Ltd.
5FL, 235 Pangyoyeok-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13494 Korea
Phone: +82-31-696-7750
Fax: +82-31-696-7751

● **Australia**
Anritsu Pty. Ltd.
Unit 20, 21-35 Ricketts Road,
Mount Waverley, Victoria 3149, 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

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