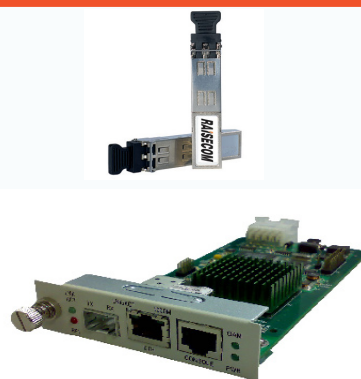**Datasheet**

RC552-GE Q-in-Q Media Converter
10/100/1000M Auto Negotiation
IEEE802.3ah OAM-Compliant

RC552-GE, IEEE802.3ah OAM compliant copper to fiber Gigabit Ethernet solution, is Raisecom's new generation media converter. For quite a long time, carriers and service providers have been suffering from the inconvenience and complexity of using various types of NMS to manage their huge quantity of devices from various vendors. Sometimes, access media converters are even unable to manage at all. However, with the exponential growth of Ethernet access and the deployment of Metro Ethernet and Nation-wide Ethernet as transportation network, the demands of managing Ethernet network elements are no more ignorable. Raisecom RC552-GE 802.3ah OAM and SNMP both compliant media converter, highlighted with its Q-in-Q and maximum interoperability, will enable carriers and service providers to have a crystal-clear vision of their network and an easy convenient managed demarcation point.

RC552-GE IEEE802.3ah
OAM Media Converter

Feature

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Construction	Chassis module. Compatible with Raisecom RC001/RC002 series chassis
Fiber link option	Dual-strand fiber/single strand fiber (WDM)
Max frame size	1518 Bytes (100M) 9728 Bytes (1000M)
Transmission distance	Dual-strand fiber: up to 80km Sinlge strand fiber: up to 40km
Bandwidth management	Electrical port upstream and downstream bandwidth allocation, the increasement is 80kbps at 10M, 800kbps at 100M and 8Mbps at 1000M. The customer gets corresponding bandwidth as he pays for.
Fault propagation	1. From optical port to electrical port 2. From electrical port to the other electrical port (OAM function enabled) Form electrical port to optical port (OAM function disabled) 3. Optical port ALS (OAM function disabled)
Q-in-Q	Q-in-Q functionality (add outer tag) makes the customer packets tunneled and unmodified through the provider's network by using a provider configured 802.1Q VLAN tags, alleviating the burden of aggregation switch
IEEE802.3ah OAM standard function	RC552 has two working modes: Master and Slave. Central Office device works at Master mode, and Customer Premise device at Slave mode. The OAM functions are originated by Master device.
Remote loopback	Originate OAM loopback operation to remote device, and execute OAM loopback operation from remote device. Loopback results can be forwarded back to switch for analysis.
Link monitoring	Report local events to remote device, including Critical Event (voltage and temperature abnormal) and Dying Gasp (power down). Request remote device MIB variable, and answer MIB variable request from remote device.
OAM discovery	Check if remote device has implemented/enabled IEEE802.3ah OAM function, and negotiate with remote device.
IEEE802.3ah OAM extended function	The extended functions can only be implemented when RC552 media converters are deployed in pair.

Specification

Management port	1 console (RJ45)
Serial port configuration	9600bps/8bit/none parity/1 stop bit/none flow control
User port	1 10/100/100BaseTX (RJ45) 1 1000BaseFX (SFP module)
Indicators	Power Supply RF1 for dying gasp indication 1000M for electrical port LNK/ACT for electrical port LNK/ACT for optical port OAM
Dimension	91(W)*155(D)*25(H)mm
Weight	TBC
Power supply	AC: 90~264V, 47~63Hz DC: 36~75V
Power consumption	≤ 5W
Working ambience	Temp: -5~60 centigrade RH: 5~90% non-condensing
Storage ambience	Temp: -25~85 centigrade RH: 20~90% non-condensing
Safety compliance	CE marking FCC Class A

Remote management	Monitor and configure media converters at remote sites on the GUI of Raisecom NView NNM system
Loopback	1. Local optical port in-bound loopback 2. Local optical port out-bound loopback 3. Remote optical port out-bound loopback
Local management	Console port is provided on RC552 for local management, including status review, device configuration, and firmware upgrade
Upgrade	Firmware upgrade is supported through local console port
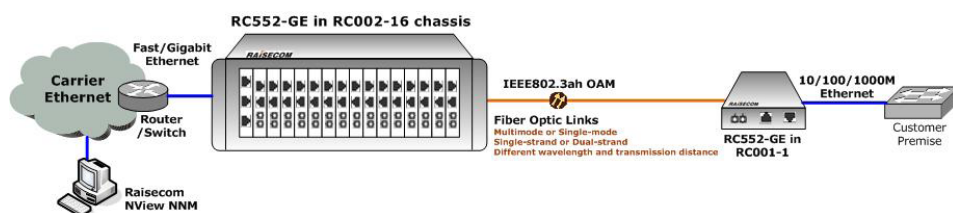
Compliance

Standards & protocols	IEEE802.3x full duplex on 10BaseT, 100BaseTX,1000BaseT IEEE802.3-2002 IEEE802.3u 100BaseTX IEEE802.3ab 1000BaseT IEEE802.3z 1000BaseX IEEE802.3ah-2004 Q/RC001-2002 Q/RC002-2002

Typical Application

Ordering Information

Part Number	Description
RC552-GE	IEEE802.3ah OAM-compliant media converter module with bandwidth allocation for both egress and ingress traffic, increasement is 80kbps at 10M, 800kbps at 100M and 8Mbps at 1000M