Datasheet

RC702-GESTM4 Ethernet over SDH Gateway

RC702-GESTM4 is a standalone Ethernet-over-SDH network edge access platform in compact metal enclosure. It is designed for fully utilizing the existing STM1/STM4 network resources to provide subscribers with SLA MAN or even WAN Ethernet access service. It introduces standard encapsulation technology such as GFP/LAPS to map Fast/Gigabit Ethernet traffics into SDH STM1/STM4 frame structure.

RC702-GESTM4 provides 1+1 MSP protection on STM1/STM4 interfaces and an expansion slot for Ethernet interface. Three different types of Ethernet expansion cards are available to provide point-to-point and point-to-multipoint applications respectively. RC702-GESTM4 is widely welcomed by incumbent carriers and service providers to generate new revenues while preserving origianl captical investment.

RC702-GESTM4
Ethernet over SDH Gateway

Feature

SDH interface	1+1 MSP protected STM1/STM4 interfaces User configurable STM1/STM4 transmission circuits SFP connectors with DDF diagnostic function Flexible bandwidth with VC4/VC3/VC12 granularity Support LCAS in VC4/VC3/VC12 virtual concatenation GFP and LAPS encapsulation Support up to 8 VCG with MP-type expansion card
Ethernet interface	Support MTU up to 1632 Bytes (upto 9600 with N-type expansion card) Per-port rate limiting from 62Kbps to 1000Mbps Per-port broadcast, multicast, and DLF storm restriction 802.1Q VLAN, 4K active VLAN Support VLAN stacking Q-in-Q 802.3x and back-pressure flow control 8K MAC address table, 30 static MAC address entries MAC address learning enable/disable based on port Configurable MAC address aging time from 0 ~ 3825 seconds Support QoS, 4 output queues Support transparent transmission of BPDU, LACP and 802.1x frames Support per-port loopback detection to prevent from Ethernet loops
Ethernet expansion cards	N-type: combo GE interface without switching or remote in-band management; SFP optical port; 1000Mbps fixed speed copper port
	P-type: separate optical or copper GE interface with switching and remote in-band management; SFP optical port; 10/100/1000Mbps copper port with auto-negotiation and auto-MDI/MDIX
	MP-type: combo GE interface with switching and remote in-band management functions; SFP optical port; 10/100/1000Mbps copper port with auto-negotiation and auto-MDI/MDIX
Clock	Master clock or slave clock (following SDH line clock)
Upgrade	Support online software upgrade for both local and remote devices
Local management	Local management through CLI and SNMP
Remote management	P-type and MP-type expansion cards support remote in-band management by transmitting management information in a management VLAN with user services; Remote management through DCC channel is also possible.
Management software	Raisecom NView NNM5 management platform and RC702-GESTM4 EMS element manager

Specification

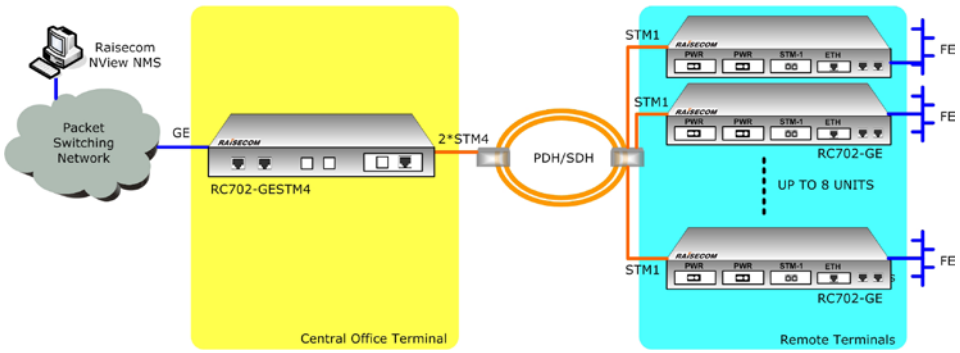
SDH interface	155.520Mbps/622.080Mbps Line code: NRZ Connector: SFP with DDF STM1/STM4 configurable in bootrom, effective after reboot
GE copper interface	N-type: 1000M full duplex P & MP-type: 10/100/1000M auto-negotiation auto-MDIX Connector: RJ45 VC4/VC3/VC12 with LCAS GFP and LAPS encapsulation
GE optical interface	1000Base-X Connector: SFP LC Support DDF function VC4/VC3/VC12 with LCAS GFP and LAPS encapsulation
Console interface	RS-232 9600bps/8bit/none parity/1 stop bit/none flow control Connector: RJ45
SNMP interface	1 (10/100M Ethernet port) Connector: RJ45
Dimension	440(W)*43.6(H)*300(D)mm
Weight	< 4KG
Power supply	AC: 90~264V, 47~63Hz DC: -36 ~ -72V
Power consumption	Redundant power supply ≤ 20W (at max load)
Working environment	Temp: -5 ~ 50 Celsius RH: < 90% non-condensing
Safety compliance	CE certification

Raisecom Technology Co., Ltd.
Room 217 South Rainbow Plaza,
No 11 Shangdi Information Road,
Beijing 100085, China

Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com
http://www.raisecom.com

Typical Application

Delivering point-to-point Gigabit Ethernet connection over STM-4 circuits



Aggregates 8 Fast/Gigabit Ethernet to Gigabit Ethernet over two STM-4 circuits

Ordering Information

Part Number	Description
RC702-GESTM4-AC	1U 19" standalone, redundant AC power supplies
RC702-GESTM4-DC	1U 19" standalone, redundant DC power supplies
RC702-SC-GE	N-type expansion card without switching functions, combo interface, SFP optical, 1000M copper
RC702-SC-P-T	P-type expansion card with switching functions, 10/100/1000M copper, auto negotiation, remote in-band management
RC702-SC-P-X	P-type expansion card with switching functions, SFP optical, remote in-band management
RC702-SC-GE-MP	MP-type expansion card with switching functions, combo interface, SFP optical, 10/100/1000M copper, auto negotiation, remote in-band management

RC702-SC-GE
N-type Expansion Card

RC702-SC-P-T
P-type Copper Expansion Card

RC702-SC-P-X
P-type Fiber Expansion Card

RC702-SC-GE-MP
MP-type Expansion Card

Compliance

Standards & protocols	For SDH port: ITU-T G.707 ITU-T X.86 ITU-T G.7041 ITU-T G.813 ITU-T G.957 ITU-T G.703 ITU-T G.831 For Gigabit Ethernet port: IEEE802.3x full duplex on 10BaseT and 100BaseTX IEEE802.3 10BaseT IEEE802.3u 100BaseTX SNMPv1/v2c/v3

Raisecom Technology Co., Ltd.
Room 217 South Rainbow Plaza,
No 11 Shangdi Information Road,
Beijing 100085, China

Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com
http://www.raisecom.com