

Raisecom Technology Co., Ltd.

Datasheet

RC953E-GESTM1 Channelized Gigabit Ethernet Gateway with Inverse Multiplexing

RC953E-GESTM1 is an inverse multiplexing Ethernet Gateway that connects Gigabit Ethernet networks across a PDH/SDH based transportation network. It effectively helps carries to utilize the existing E1 frastructure to provide Gigabit service instantly. RC953E-GESTM1 employs HDLC encapsulation technology and supports up to 8E1 inverse multiplexing. It is often deployed in central site for aggregating up to 63 different user traffics with single E1 link of each. there are

two channelized STM-1 interfaces support 1+1 protection and two Gigabit Ethernet interfaces with one RJ45 and one SFP fiber. RC953E-GESTM1 is installed at the central office site to act as an SNMP active device, which is capable of remote management of customer premise equipment, including RC952/RC953/RC954 series and even media converters that might connect with them. All the user configurable functionalities can be set through the NNM system.



Specification

Feature

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Working mode	*Single E1 Mode for aggregating up to 63 remote sites (with RC952) *Inverse Multiplexing mode for flexibly transmitting Ethernet Service over up to 8* E1 links (with RC953/RC954-FE4E1/8E1)	
Automatic E1 Link Adjustment	In Inverse Multiplexing mode, automatically adjust the E1 link capacity of transmission channel if one or more E1 links fails and assures the high-reliable Ethernet data delivery	
Electrical GE interface	Interface type: RJ-45, Speed/duplex mode: 10/100/1000M , full/half duplex Support flow control IEEE802.3x	
Optical GE interface	Interface type: SFP/LC Support optional distance and wavelength	
SDH interface	1x9/DSC or SC Speed: 155.520Mbit/s Code: NRZ Support 1+1 low order path protection Clock mode: master or slave; support clock source auto cut-off under slave mode	
E1 channel mode	Encapsulation: HDLC over E1 Support local and remote loop back *Single E1 Mode Framed E1 and Unframed E1 mode Framed E1: N*64K, (FAS, FAS+CRC4, FAS+CAS, FAS+CRC4+CAS) *Inverse Multiplexing Mode Framed E1 mode (PCM31, FAS+CRC4)	
BERT function	Inner BERT enables a flexible way of testing E1 links	
Enhanced E1 link monitor	Traffic counter provides an effective E1 link monitoring by statistics collection of Rx, Tx, total and error packets amount on E1 port	
Strom restraining	Restrain broadcast, multicast, DLF frame	
MAC Address Table 8192 MAC Address		
Trunking	Link Aggregation of Ethernet port enables a redundant Ethernet access	
VLAN	Support port VLAN and tag VLAN	
Fault pass through	From SDH port to GE port	
Management	In-band and out-of-band (SNMP, Telnet, CONSOLE) management	
Remote management	Remote RC952, RC953 series can be managed.	
Upgrade	Support local and remote on-line upgrade through FTP/TFTP	
Redundant Power Supply	Redundant optional AC/DC power supplies ensure the most uptime	

GE interfaces	1 electrical : RJ45
	1 optical: SFP
	Support GE interface
	cascade
SDH interface	1x9/DSC or SC
SNMP port	RJ-45
CONSOLE port	RJ-45
System Indicator	SYS, Flashing indicates CPU works normally
Power Supply	PWR: ON indicates the
Indicaor	power supply of device works normally
	PWR1: ON indicates first
	power supply works normally
	PWR2: ON indicates second
	power supply works normally
Indicators for	optical GE port:
Ethernet ports	LNK/ACT, SD
	electrical GE port:
	1000M, 100M
Indicators for SDH ports	LOF, LOS, ALM, MAS
Indicators for SNMP port	LNK/ACT, 100M
Dimension	440(W)*360(D)*43.6(H)mm
Weight	3.3kg
Power supply	dual power supplies
	AC: 180~260V
	DC: - 36~-72V
Power	≤ 40W (at max load)
consumption	
Working	Temp: -5~50 centigrade
ambience	RH: ≤90% non-condensing
Storage	Temp: -25~85 centigrade
ambience	RH: 20~90% non-condensing
Safety	CE certification

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compliance



Typical Application



Ordering Information

Inverse Multiplexing Ethernet Gateway, 2*GE (1 copper port and 1 SFP-RC953E-GE- X- Y based optical port), 2 STM 1 ports, redundant DC or AC power supply.

x - Fiber Interface Specification

Х	Wavelength (nm)	Typical distance (Km)	
Μ	1310/850*	0~2	
S1	1310	0 ~ 25	
S2	1310	10 ~ 60	
S3	1550	15 ~ 120	
SS1	EAST: 1310Tx, 1550Rx	0 ~ 25	
SS2	WEST: 1550Tx, 1310Tx	0 ~ 25	
M: Multimode dual-strand; *850nm is customized.			

S1,S2,S3: Single-mode dual-strand;

SS1, SS2: Single-mode single-strand.

Power Supply Specification

AC AC power supply

DC DC power supply

* +24V DC power supply is customized

Compliance

Standards &	IEEE802.3
protocols	IEEE802.3u
F	IEEE802.3z
	IEEE802.3x
	ITU-T G.703
	ITU-T G.704
	ITU-T G.825
	SNMPv1/v2c/v3

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