

RC953-4FExE1T1 Series 4/8 E1 EoPDH Remote Gateway

RC953-4FExE1T1 series are 4/8 E1 EoPDH remote gateways and also intelligent Ethernet Demarcation Devices (EDD). The device offers 4 FE downlink ports and 4/8 E1 uplinks, and can be deployed in either a point-to-point topology or a point-to-multipoint topology. HDLC/GF encapsulation configurable gives the device more flexibility as a CPE. Moreover, as a Raisecom EDD, RC953-4FExE1T1 is not only capable of Ethernet switching, but is inherently good at network diagnostics. With standard OAM and CFM, the network administrators are provided with tools to keep the service channel effective. RC953-4FExE1T1 series can be managed via local/remote CLI, in-band web-based management, and can also be monitored and managed in a centralized way on the GUI of Raisecom NView NNM system.



RC953-4FE8E1T1-BL

Highlights

- Topology Flexibility** Fits in both point-to-point and point-to-multipoint EoPDH solution
- Standard GFP** makes the device capable of working with other EoPDH device adopt stand GFP encapsulation
- Demarcation Feature** Advanced Ethernet diagnostics tools standard OAM and CFM available on the device
- Easy Management** Management via local/remote CLI, in-band web-based management, and SNMP

Typical Application

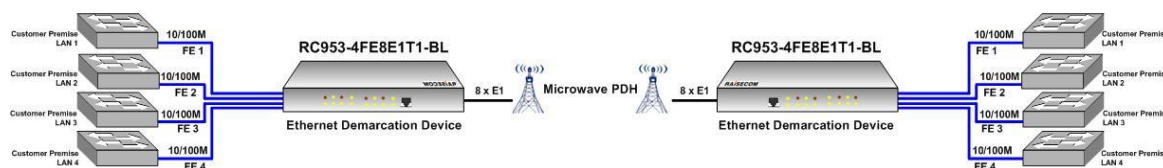


Figure.1 Point-to-Point Topology

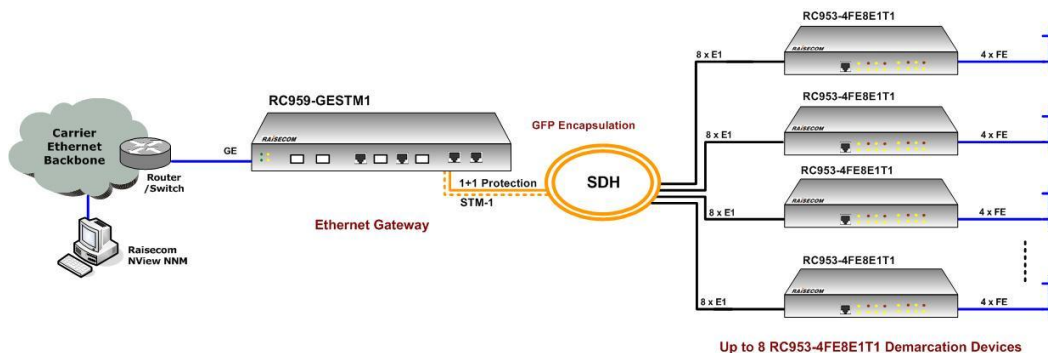
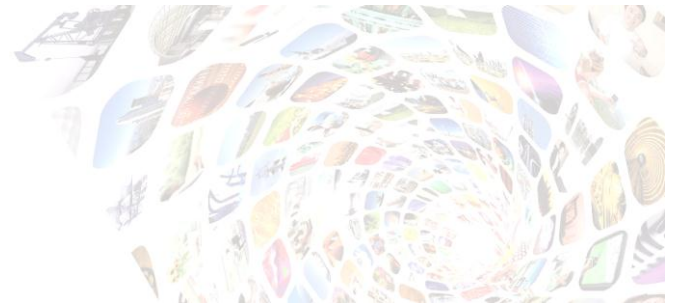


Figure.2 Point-to-Multipoint Topology

Features

EoPDH	4 FE over 4/8E1 HDLC/GFP encapsulation, software configurable HDLC: 1 virtual-channel, 1-4/8 E1 members allowed Automatic link adjust when E1 members down GFP: 1 VCG, 1-4/8 E1 members allowed Standard VCAT, LCAS
E1 port	Framed, PCM ₃₁ , FAC+CRC ₄ , CRC-auto configurable E1 loopback test Local and remote E1 LOS, LOF, AIS, CRC, GIDerror report
FE port	10/100Mbps auto-negotiation, speed and duplex mode configurable MTU: 1632 Bytes Flow Control: IEEE 802.3x in full duplex mode Back pressure in half duplex mode
Forwarding mode	Store and Forward Buffer size: 128KB
MAC Address Table	8K MAC address Add/remove/search MAC address table entries View MAC address table statistics MAC address aging time configurable: 15-3825s MAC address learning threshold per port Optional MAC address table limit per port: 1-255
VLAN	4K active VLAN Port PVID overwrite Q-in-Q Switch port protect
QoS	4 queue per port CoS/DSCP/port-based Global queue scheduling : SP/WRR WRR weight range: 1-125
Rate Limit	Per port with increments 64Kbps (64K-1M), 1Mbps (1-100M)
Storm Control	Broadcast/Multicast/Unicast DLF storm control
Port Mirroring	Mirroring of egress/ingress/bidirectional traffic of ports
Link Aggregation	4 groups, up to 4 ports in each group
Loopback Detection	Shutdown port when loopback is detected
Packet Relay	Optional STP/DOT1X/LACP relay, threshold configurable
Cable Diagnostics	Cable status report, including position information
OAM	IEEE 802.3ah OAM (discovery, link performance monitor, remote loopback testing, remote failure indication)



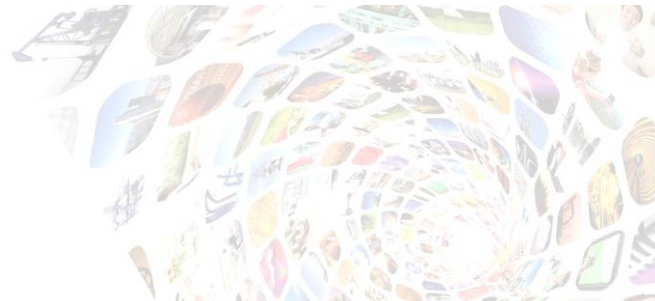
	Extended OAM
CFM	IEEE 802.1ag ITU-T Y.1731
SLA	Layer-2/Layer-3 SLA
DHCP	Client DHCP Snooping
ACL	IP-based/MAC-based ACL
Keep-Alive	Report device information regularly
RMON	Group 1, 2, 3, 9
Syslog	Support
Routing Protocol	Static routing & default gateway
Auto-Configuration	Automatic configuration loading
Scheduling	Execute command script periodically
Security	User classification and password protection RADIUS TACAS+ Port Isolation PPPoE Agent
Hardware Environment Monitoring	Monitor temperature and voltage
Management	CLI-based management through local CONSOLE or remote Telnet/SSH In-band web-based management GUI-based SNMP management on Raisecom NView NNM system
Cluster Management	Raisecom Neighbor Discovery Protocol (RNDP)

Specifications

Capacity	32MB SDRAM 8MB Flash 128KB Switch buffer
LAN interface	4*10/100Base-TX RJ-45 connector Speed: 10/100Mbps auto-negotiation Duplex Mode: Full/Half Auto-MDI/MDIX support
WAN interface	4/8*E1 ports 120Ω balanced, RJ-45 connector 75Ω unbalanced, BNC connector Bit Rate: 2048Kbps±50ppm

Compliances

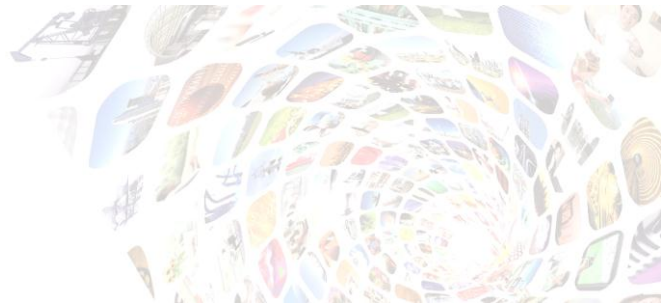
Standards & protocols	IEEE802.3-2002 IEEE802.3 10BaseT IEEE802.3u 100BaseTX IEEE802.3x Flow Control IEEE802.1Q VLAN IEEE802.1ad QinQ IEEE802.3ad Link Aggregation IEEE802.1p CoS Prioritization IEEE802.3ah OAM IEEE802.1ag CFM ITU-T Y.1731 Service OAM Static Routing
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CONSOLE port	Code: HDB3 RS232 Baud Rate: 9600 RJ-45 connector	RMON I and II standards SNMP v1/v2c/v3 ITU-T G.703, G.704, G.823, G.824 ITU-T G.7041, G.7042, G.7043, G.8040
Indicator	PWR for power supply SYS for system operation LNK/ACT and 100M for each FE port LOS for each E1 port	
Dimension	44(H)x300(W)x135(D)mm	
Weight	≤ 1.425kg	
Power supply	AC: 100-240V DC: -48V WP: wide-range	
Power consumption	≤ 10W (full load)	
Working environment	Temp: -5~55 Celsius RH: ≤ 90% (35 Celsius)	
Storage environment	Temp : -40~80 Celsius RH : 5~90% non-condensing	

Ordering Information

RC953-4FE4E1T1-BL-AC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (120Ω balanced, RJ-45) ports on LAN side, AC power supply
RC953-4FE4E1T1-BL-DC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (120Ω balanced, RJ-45) ports on LAN side, DC power supply
RC953-4FE4E1T1-BL-WP	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (120Ω balanced, RJ-45) ports on LAN side, WP wide-range power supply
RC953-4FE8E1T1-BL-AC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (120Ω balanced, RJ-45) ports on LAN side, AC power supply
RC953-4FE8E1T1-BL-DC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (120Ω balanced, RJ-45) ports on LAN side, DC power supply
RC953-4FE8E1T1-BL-WP	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (120Ω balanced, RJ-45) ports on LAN side, WP wide-range power supply
RC953-4FE4E1-AC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (75Ω balanced, BNC) ports on LAN side, AC power supply
RC953-4FE4E1-DC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (75Ω balanced, BNC) ports on LAN side, DC power supply



side, DC power supply

RC953-4FE4E1-WP

Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 4 E1 (75Ω balanced, BNC) ports on LAN side, WP wide-range power supply

RC953-4FE8E1-AC

Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (75Ω balanced, BNC) ports on LAN side, AC power supply

RC953-4FE8E1-DC

Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (75Ω balanced, BNC) ports on LAN side, DC power supply

RC953-4FE8E1-WP

Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 8 E1 (75Ω balanced, BNC) ports on LAN side, WP power supply