

RC951E-4FEE1 Single E1 EoPDH Remote Gateway

RC951E-4FEE1 is a single E1 EoPDH remote gateway and also an intelligent Ethernet Demarcation Devices (EDD). The device offers 4 FE downlink ports and 1 E1 uplink, and can be deployed in either a point-to-point topology or a point-to-multipoint topology. HDLC/GFP encapsulation configurable gives the device more flexibility as a CPE. Moreover, as a Raisecom EDD, RC951E-4FEE1 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. RC951E-4FEE1 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.



RC951E-4FEE1

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

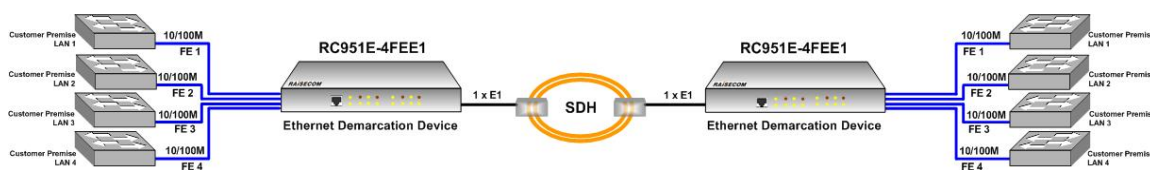


Figure.1 Point-to-Point Topology

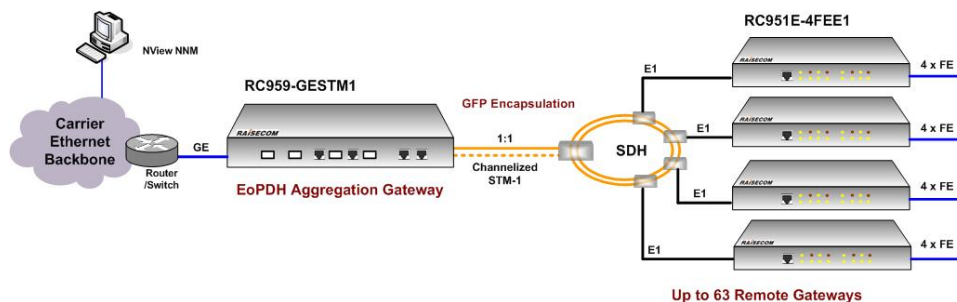


Figure.2 Point-to-Multipoint Topology

Features

EoPDH	4 FE over 1 E1 HDLC/GFP encapsulation, software configurable
E1 port	Framed, PCM31, FAC+CRC4, 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	1*E1 ports 120Ω balanced, RJ-45 connector 75Ω unbalanced, BNC connector Bit Rate: 2048Kbps±50ppm Code: HDB3
CONSOLE port	RS232 Baud Rate: 9600 RJ-45 connector

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 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 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

CE marking

Ordering Information

RC951E-4FEE1-AC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 1 E1 (120Ω balanced, RJ-45 or 75 Ω unbalanced, BNC) port on LAN side, AC power supply
RC951E-4FEE1-DC	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 1 E1 (120Ω balanced, RJ-45 or 75 Ω unbalanced, BNC) port on LAN side, DC power supply
RC951E-4FEE1-WP	Intelligent EoPDH remote gateway, 4 10/100M FE ports on WAN side, 1 E1 (120Ω balanced, RJ-45 or 75 Ω unbalanced, BNC) port on LAN side, WP wide-range power supply