

## RC953-FE4E1/8E1 RC953-FX4E1/8E1

## RC953-FE8E1-BL RC953-FX8E1-BL

### Fast Ethernet over 4/8E1 Inverse Multiplexer (Remote Terminal)

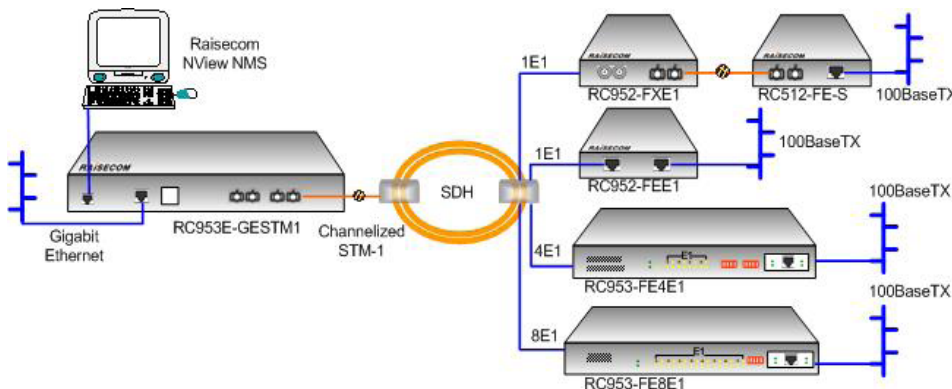
RC953-FE4E1/8E1, RC953-FX4E1/8E1, RC953-FE8E1-BL, RC953-FX8E1 is standalone Inverse Multiplexer which delivers Ethernet services over existing PDH/SDH transportation network. It is capable of providing a real Ethernet throughput of 8Mbps(4E1 inverse multiplexing) and 16Mbps (8E1 inverse multiplexing) respectively. RC953 remote terminal devices are used in point to point topology with RC953 series, or in point to multipoint topology with Ethernet gateway RC953E-3FE16E1 or RC953E-GESTM1. Its advanced features such as automatic E1 link adjustment, E1 loopback, remote manageable provide carriers a cost-effective, flexible and reliable solution for high-quality Ethernet Service delivery by using PDH/SDH network resources.

### Feature

E1 mode	Framed E1 mode (PCM31, FAS+CRC4 by default)
Automatic E1 Link Adjustment	Automatically adjust the E1 link capacity of transmission channel if one or more E1 link fails and assures the high-reliable Ethernet data delivery
Ethernet Encapsulation	HDLC-over-E1 GFP (on next version)
E1 Loop Back	Support local and remote loop back
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.
Clock Mode	Master and Slave
Maximum Transmission Unit	1536 bytes (Electrical fast Ethernet port) 2000 bytes (Optical fast Ethernet port)
Flow control	IEEE802.3x in full duplex
VLAN	VLAN transparent forwarding VLAN swapping, stacking (Q-in-Q) and rewriting (on next version)
Tranparent transmission	Support BPDU, Dot1x, GMRP, GVRP, and ICMP on per port
Management	DIP-switch configuration and remote manageable by RC953-8FE16E1 in central office



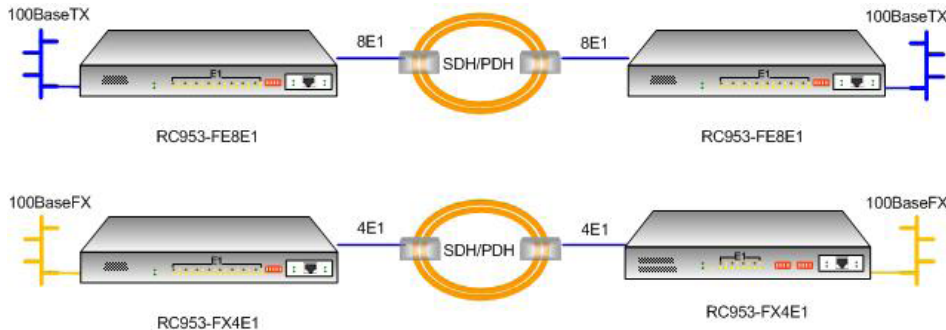
### Typical Application 1



### Compliance

Standards & protocols	IEEE802.3 Ethernet IEEE802.3x full duplex on 10BaseT, 100BaseTX ports IEEE802.3u 100BaseTX ITU-T G.703 ITU-T G.704 ITU-T G.823
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## Typical Application 2



## Specification

Electrical fast Ethernet port	Speed: 10/100BaseT Connector: RJ-45 MDI/MDIX auto crossover IEEE802.3x flow control
Optical fast Ethernet port	Speed: 100BaseFX Connector: SC IEEE802.3x flow control
E1 port	Connector: RJ-45 or BNC Impedance: 120 or 75 ohm Line coding: HDB3
System Indicator	SYS, Flashing indicates CPU works normally
Power Supply Indicaor	PWR, ON indicates the device is powered on;
Loopback test indicator	LOOP
Indicators for electrical Ethernet ports	LNK, 100M, ACT and FDX indicators for each electrical Ethernet port
Indicators for optical Ethernet ports	LNK/ACT and SD for each optical Ethernet port
Indicators for E1 ports	LOS, PAT, LER and RAL for each E1 port
Dimension	440(W)*180(D)*44.45(H)mm
Weight	2.8kg
Power supply	AC: 180~260V, 47~63Hz DC: - 36~-72V
Power consumption	≤ 10W (at max load)
Working ambience	Temp: -5~50 centigrade RH: 20~90% (35 centigrade)
Storage ambience	Temp: -25~85 centigrade RH: 20~90% non-condensing

## Ordering Information

Part Number	Description
RC953-A-B-C-D	<p>A: FE8E1, one electrical fast Ethernet port and 8 E1 ports; FX8E1, one optical fast Ethernet port and 8 E1 ports; FE4E1, one electrical fast Ethernet port and 4 E1 ports; FX4E1, one optical fast Ethernet port and 4 E1 ports;</p> <p>B: BL, 120ohm balanced RJ-45 E1 connector Blank, 75ohm unbalanced BNC E1 connector</p> <p>C: Optical fast Ethernet connector type which stands for M, S1, S2, S3, SS13, SS15, SS23 or SS25</p> <p>D: AC, AC power supply 220v DC, DC power supply -48v</p>

### Specification of optical fast Ethernet port

	Optical Connector	Wavelength (nm)	Rx sensitivity (dBm)	Tx Power (dBm)	Typical distance (km)	Attenuation (dB/Km)
M	SC	1310/850*	<-29	-18 - -14	2	3
S1	SC	1310	<-34	-15 - -8	25	0.5
S2	SC	1310	<-34	-5 - 0	60	0.5
S3	SC	1550	<-36	-5 - 0(DFB)	120	0.25
SS13	SC	1310	<-30	-12 - -3	25	0.5
SS15	SC	1550	<-30	-5 - 0	25	0.5
SS23	SC	1310	<-32	-12 - -3	50	0.5
SS25	SC	1550	<-32	-5 - 0	50	0.5

\* 850nm multi mode optical connector is customized