

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

RC953-FE4E1/8E1 (RC953-FX4E1/8E1) is Inverse Multiplexer which delivers Ethernet services over existing TDM transportation network. These equipments can be used in point-to-point topology and hub-and-spoke topology with RC953-8FE16E1 located in the central office. RC953-FE4E1 (RC953-FX4E1) allows the transmission of fast Ethernet over 4 bonded E1 circuits (8M) and RC953-FE8E1 (RC953-FX8E1) allows the transmission of fast

Ethernet over up to 8 bonded E1 circuits (up to 16M). There is optical option for fast Ethernet port to provide an economical path towards extending the distance of an existing Ethernet network. Additionally its advanced features such as automatic E1 link adjustment, provide our carriers a cost-effective, flexible and reliable solution for high-quality Ethernet Service delivery by using TDM network resources.



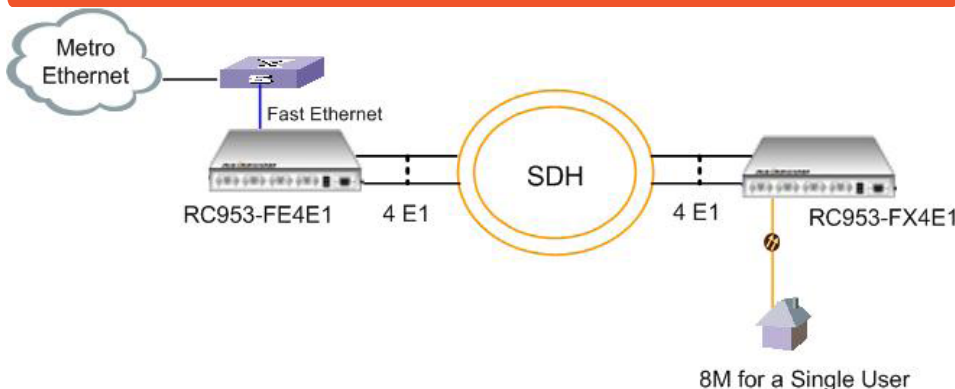
### Feature

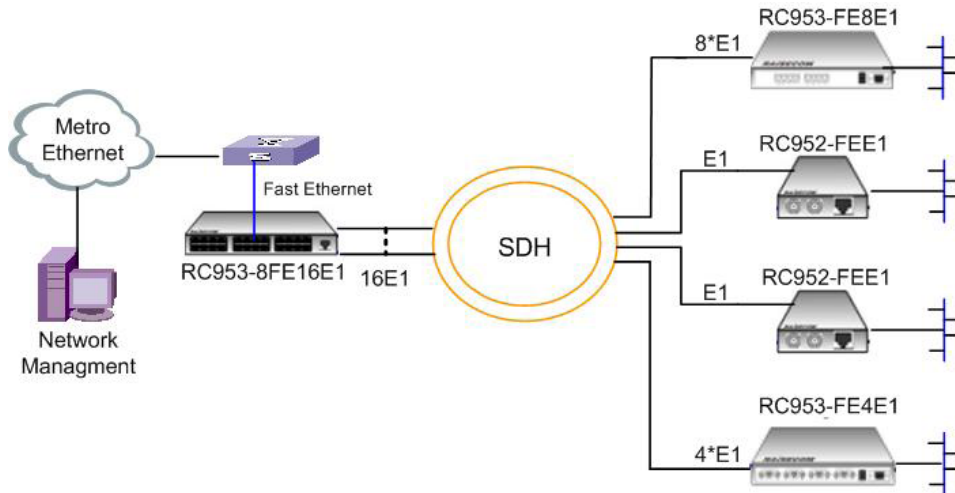
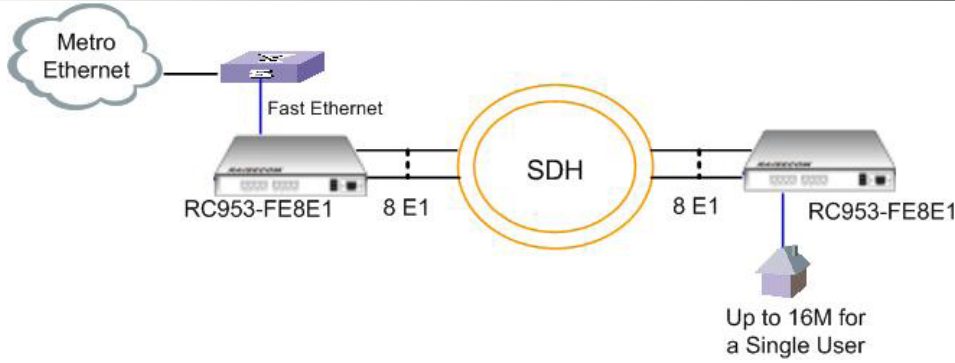
E1 mode	Framed E1 mode (PCM31, FAS+CRC4 by default)
Automatic E1 Link Adjustment	Automatically adjust the E1 link capacity of transmission channel if one or more E1 link fails and assures the high-reliable Ethernet data delivery
Ethernet Encapsulation	HDLC-over-E1 GFP (on next version)
E1 Loop Back	Support 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)
Transparent transmission	Support BPDU, Dot1x, GMRP, GVRP, and ICMP on per port
Management	DIP-switch configuration and remote manageable by RC953-8FE16E1 in central office

### 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	LNKT, 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	430(W)*266(D)*1U(H)mm
Weight	2.8kg
Power supply	AC: 90~264V, 47~63Hz DC: - 36~75V
Power consumption	≤ 10W (at max load)
Working ambience	Temp: 0~45 centigrade RH: 20~90% non-condensing

### Typical Application





## 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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## Ordering Information

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

### 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	<-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