

# **ISAP1000** STM1/E1 Acess Multiplexer

iSAP1000 is 1U 19" rack type STM-1/E1 terminal multiplexer which delivers traditional PDH services over SDH networks. iSAP1000 provides connectivity for up to 16E1. The product complies with SDH standards and interfaces with existing SDH backbones through a single or 1+1 protection STM-1 interface. iSAP1000 supports a variety of management access over console, and SNMP. iSAP1000 provides two Gigabit Combo ports (2-port 10/100/1000Base-T and 2-port 1000Base-X SFP slot) with 16x E1 or 2x STM-1 fiber interfaces. The two GE combo ports support Link aggregation, port based VLAN and 802.1Q VLAN function.

### **Features**

- Provides 2-port STM-1 fiber with 1+1 protection.
- Supports Internal clock and recovery clock modes
- Supports Single E1 fractional and unframed E1 service; Multiple E1, fractional E1
- Supports PCM31, FAS+CRC4, CRC self-test
- Supports HDLC/GFP bridge operation, 16x VCG with total 16 remote device, 16E1 Per VCG, MAX data rate 32Mbps Per VCG
- Supports 16E1 balanced RJ45 or unbalanced BNC connectors
- Maximum 220ms delay variance between E1 links
- Supports 2x GbE Combo ports
- Supports IEEE 802.1Q VLAN and QinQ, Link aggregation
- Fiber port support ALS(Auto Laser Shutdown) function
- Built-in BERT for performing local and remote loopback
- Supports Console, GUI and SNMP management
- Supports local and remote FTP/TFTP f/w upgrade
- Complies with ITU-T G.8040 standard

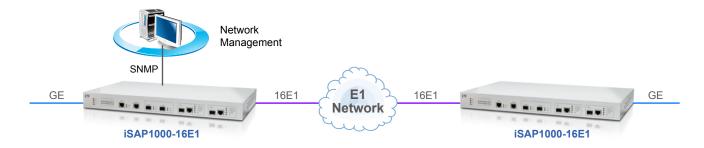
### **Specifications**

Ethernet Interface	Supports 2x GE combo ports
	Auto Negotiation, AUTO-MIDX, 10M/100M/1000M, Full/Half Duplex
	Connector: RJ45
	Supports 802.3x flow control
Optical Interface	1000FX, SFP
	Connector: LC
	Supports 802.3x flow conrol
E1 Interface	Up to 16x E1(ITU-T G.703)
	Line Impedance : 75ΩBNC or 120ΩRJ45
	Bit rate : 2048kbps±50ppm
	Line code : HDB3
STM-1 Interface	Supports 2x STM-1 optical fiber port with SFP slot
	Supports 1+1 optical fiber protection

Management port	One console port with RJ45 connector One SNMP Ethernet port with RJ45 connector				
LED Indicators	SYS, PWR, PWR1, PWR2, GE(LNK/ACT, SD), E1(LOS, SYNC)				
Standards	IEEE802.3 Ethernet, IEEE802.3u, IEEE802.3Z, IEEE802.3X, IEEE802.1Q, IEEE802.1ad, SNMPv1/v2c/v3, ITU-T G.703, ITU-T G.704, ITU-T G.823				
Dimensions	310 x 440 x 44mm (D x W x H)				
Power	AC: 90-265V, DC: -48V, Supports AC+AC, DC+DC, AC+DC				
Power Consumption	<24W				
Temperature	Operating: -5 ~ 50°C Humidity : ≤90% non-condensing				

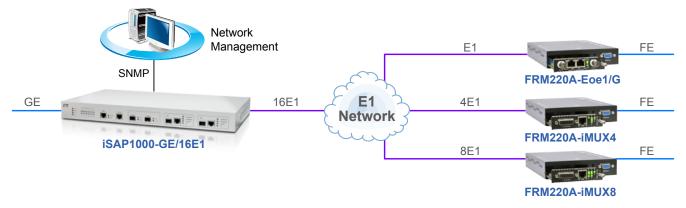
# **Application**

#### P to P, GE over 16E1 application

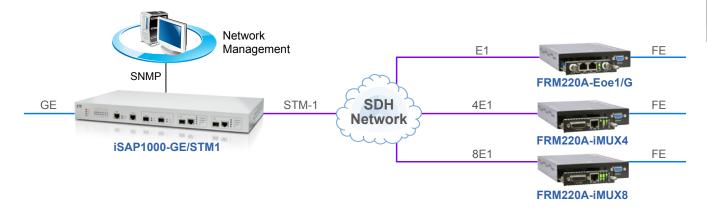


## **Application**

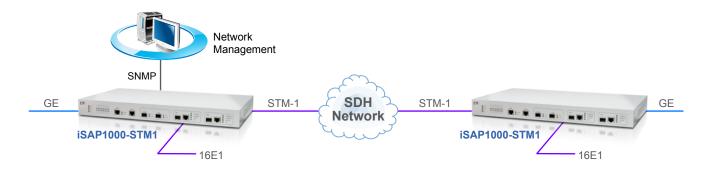
#### Point to Multi-points 16E1 aggregation



#### Point to Multi-points 16E1 aggregation over STM-1



#### **GE + 16E1 over STM-1 Application**



# **Ordering Information**

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Model Name	Description
iSAP1000-16E1B-AD	2x GbE Combo over 16E1 BNC, P to P, 1U 19" Rack, AC+DC power
iSAP1000-16E1R-AD	2x GbE Combo over 16E1 RJ45, P to P, 1U 19" Rack, AC+DC power
iSAP1000-GE/16E1B-AD	2x GbE Combo over 16E1 BNC, P to M, 1U 19" Rack, AC+DC power
iSAP1000-GE/16E1R-AD	2x GbE Combo over 16E1 RJ45, P to M, 1U 19" Rack, AC+DC power
iSAP1000-GE/STM1-AD	2x GbE Combo over STM1, P to M, 1U 19" Rack, AC+DC power
iSAP1000-STM1B-AD	2x GbE Combo + 16E1 BNC over STM1, P to P, 1U 19" Rack, AC+DC power
iSAP1000-STM1R-AD	2x GbE Combo + 16E1 RJ45 over STM1, P to P, 1U 19" Rack, AC+DC power

		Comector	Power Type
iSAP	1000 -		<b>-</b>
Example: iSAP	1000 -	16E1B – Al	)