



# **iSAP5100**

### STM1/E1, Data, Ethernet, Voice **Managed Multiplexer (4.5U)**

The iSAP5100 is a 5U 19" 20 slots rack type STM1 / E1 Time Division Multiplexer for fractional E1 network access, which is designed for non-stop operation. There are 18 slots available for hot-swappable iSAP5100 I/O cards. Two slots are provided for CPU Controller cards and two slots are provided for power supplies. Uplink supports STM1 fiber and E1 copper, two types of connection, maximum up to 144x E1 cross connect for Voice and Data. The iSAP5100 accommodates up to two separate power supplies, which may derive power from AC (110/220) or DC (-36~72V) power sources. When two power supplies are installed, the modules provide complete power redundancy and are hot swappable even during the E1 cards' transmission. The iSAP5100 provides STM1 fiber and E1 copper uplink with a the maximum E1 support of up to 96 E1 channels with cross connection for Voice and Data or interface including RS232, V.35, G64K, FXS, FXO, ET100 and E&M.

## **Interface Cards**

- Control card: 5100-MS-DM-96, 5100-MS-DM-155
- E1 card: 5100-8E1, 5100-16E1
- Power modules: 5100-AC240, 5100-DC240
- I/O cards: 5100-RS232, 5100-RS232/C, 5100-G64K, 5100-V35, 5100-ET100, 5100-E&M, 5100-FXS, 5100-FXO

#### **Feature**

- Supports MAX. 96xE1 with full cross-connect, Supports DS0 cross-connect
- Supports 16 channel Main E1 LTU card
- Supports E1 time slot broadcast function
- Modular design for Voice I/O card, the voice I/O card has two sub-module, each sub-module supports 4-port FXO/FXS
- All modules and cards support hot-swapping
- DCE card types included N x 64K, RS232(Sync/Async), G703-64K, ET100, E&M, FXO, FXS...etc.
- Supports Console, Telnet, SNMP and GUI management
- Available types of power built-in : AC+AC, AC+DC, DC+DC
- Modular design, 5U 19", 18-slot for I/O cards

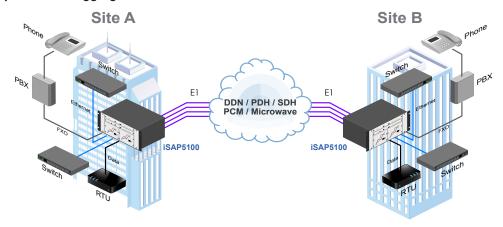
#### **Specifications**

5100-MS-DM-96	
Interface	10/100Base-TX Ethernet RJ45 port
Console	RS232
E1 Cross Connect	144xE1 Transparent cross connect , Supports E1 time slot mapping / broadcast function
CAS Cross Connect	Supports 16 time slot CAS follow voice time cross connect
5100-MS-DM-155	
Interface	Supports 1-port STM-1 155M SFP Slot on CPU card, CPU redundancy (1+1)
NMS	10/100Base-TX
Console	RS232
E1 Cross Connect	155M fiber to 63E1 and 144xE1 cross connect, supports E1 /time slot mapping/broadcast function
CAS Cross Connect	Supports time slot 16 CAS follow voice time cross connect
STM-1/E1 Drop / Insert	Supports STM-1 63E1 x 32TS to E1/IO slot 128E1 x 32TS connection
5100-8E1 / 5100-16E1	I
Interface	Supports 8E1/16E1 interface
Line Impedance	120 / 75 ohms
Frame format	CAS (PCM30)/CCS (PCM31)
Connector	RJ45
5100-RS232	
Data rate	≤38.4kbps Async or 64/128kbps Sync
Ports	6-port
Interface	RS232
5100-V35	
Interface types	V.35
Connector	HD68F (female) with cable adapter
Line code	NRZ
Data rate	Nx64kbps
5100-RS232/C	
5100-RS232/C Data rate	9600bps, 19.2Kbps Sync/Async

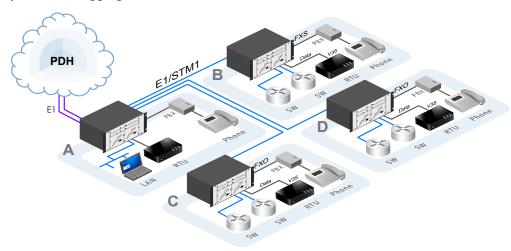
Interface	RS232	
5100-G64K		
Data rate	64Kbps, Co-directional/Contra-directional and Centra-directional	
Ports	4-port	
Connector	RJ45	
5100-ET100		
Standards	IEEE 802.3, 802.3u	
MDI/MDIX	Auto	
Data rate	10/100Mbp	
Encapsulation	HDLC	
Ports	4-port	
Connector	RJ45	
5100-E&M		
Loop current	25 mA, maximum 70mA	
Ports	8-port	
Connector	RJ45	
5100-FXS		
ITU-T Standard	G.712/G.713/G.714	
Line resistance	600Ω	
Off-hook current	25mA	
Line distance	2km	
Ports	8-port	
On-hook current	10mA+/-3mA	
Effective Ring	Frequency: 25Hz, Voltage: 75V, peak to peak110V MAX line resistance: 1500Ω	
Connector	RJ45	
Electrical & Mechanical		
Dimensions	350 × 440 × 187 mm (D x W x H)	
Environmental	Operating: 0~60°C Storage:-25~70°C Humidity: 10~90%, non-condensing	
Power	AC 220V: 165~265V, 50~60Hz, DC -48V:-36~-76VDC	
Power Consumption	< 90W	

# **Application**

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



#### Point to Multi-points 63E1 aggregation over STM-1



# **Ordering Information**

Model Name	Туре	Description
iSAP5100-CH	Chassis	5U 19" 20 slot Chassis, power modules not included (18-slot for I/O cards, 2-slot for CPU card)
iSAP5100/AC	Power	AC Power plug-in module (165 to 265 VAC)
iSAP5100/DC	Power	DC Power plug-in module ( $\pm 36$ to $\pm 76$ VDC)
isap-ems	Software	EverLink2000 EMS software for iSAP5100 and iSAP2000
iSAP5100-8E1R	Main E1 card	8 channels Main-E1 LTU card: Fractional E1 RJ45
iSAP5100-16E1R	Main E1 card	16 channels Main-E1 LTU card: Fractional E1 RJ45
iSAP5100-CAB-RJ45/4BNC	Cable	2ch E1 RJ45 to 4BNC cable (1.5 meter)
iSAP5100-MS-DM-96	CPU-card	CPU card with console, SNMP management port
iSAP5100-MS-DM-155	CPU-card	CPU card with console, SNMP mangement port and STM1 fiber port
iSAP5100-FXO	Voice Card	8 channels FXO interface card
iSAP5100-FXS	Voice Card	8 channels FXS interface card
iSAP5100-E&M	Voice Card	8 channels 2/4 wires E&M voice interface card
iSAP5100-RS232	RS-232 card	6 channels RS-232 interface card (V4.0), Low speed: 128kbps 19.2kbps Async
iSAP5100-RS232C	RS-232 card	6 channels RS-232 (V.24) interface card, Low speed: 128kbps, 19.2kbps Async with Multi-Clock function
CAB-DB62DB25F6-232-LS	Cable	RS-232 adapter cable for low speed: DB62 Male to 6x DB25 Female, 1M
iSAP5100-ET100	FE Card	4 channels 10/100Base-TX Ethernet Bridge card
iSAP5100-DATA	Data card	4 channels V.35/X.21/RS530/RS449 cards
CAB-HP68MB34F4-V35	Cable	V35 adapter cable for High speed: HP68 Male to 4x MB34 Female, 1M
CAB-HP68DB25F4-530	Cable	RS530 adapter cable for High Speed: HP68 Male to 4x DB25 Female, 1M
CAB-HP68DB15F4-X.21	Cable	X21 adapter cable for High speed: HP68 Male to 4x DB15 Female, 1M
CAB-HP68DB37F4-449	Cable	RS449 adapter cable for High Speed: HP68 Male to 4x DB37 Female, 1M
iSAP5100-G64K	64K co-directional Card	4 channels G.703 64kbps co-directional card

iSAP5100 − □□ Example: ISAP5100 - CH Example: ISAP5100 - 8E1R

iSAP5100 - Card Type