



## iSAP5100

4.5U, Data, Ethernet, Voice STM1/E1  
Managed Multiplexer

The iSAP5100 is a 4.5U 19" 18 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, G703/64K, 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-G703/64K, 5100-V35, 5100-ET100, 5100-E&M, 5100-FXS, 5100-FXO

### Features

- Supports MAX. 96x E1 with full cross-connect, Supports DSO 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\*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, 2U 19", 6-slot for I/O cards

### Specifications

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

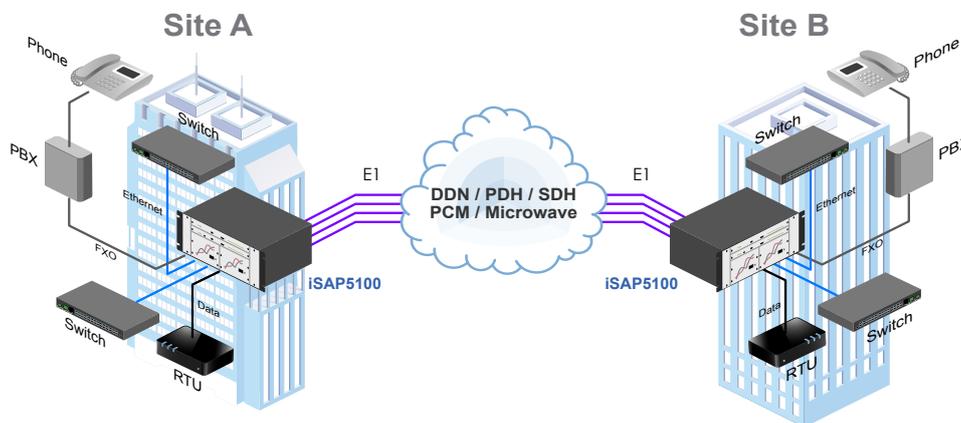
<b>5100-RS232/C</b>	
<b>Data rate</b>	9600bps, 19.2Kbps Sync/Async
<b>Ports</b>	6-port
<b>Interface</b>	RS232
<b>5100-G.703/64K</b>	
<b>Data rate</b>	64Kbps, Co-directional/Contra-directional and Centra-directional
<b>Ports</b>	4-port
<b>Connector</b>	RJ45
<b>5100-ET100</b>	
<b>Standards</b>	IEEE 802.3, 802.3u
<b>MDI/MDIX</b>	Auto
<b>Data rate</b>	10/100Mbps
<b>Encapsulation</b>	HDLC
<b>Ports</b>	4-port
<b>Connector</b>	RJ45
<b>5100-E&amp;M</b>	
<b>Loop current</b>	25 mA, maximum 70mA
<b>Ports</b>	8-port
<b>Connector</b>	RJ45
<b>5100-FXS</b>	
<b>ITU-T Standard</b>	G.712/G.713/G.714
<b>Line resistance</b>	600Ω
<b>Off-hook current</b>	25mA
<b>Line distance</b>	2km
<b>Ports</b>	8-port
<b>On-hook current</b>	10mA+/-3mA
<b>Effective Ring</b>	Frequency: 25Hz Voltage: 75V, peak to peak 110V MAX line resistance: 1500Ω
<b>Connector</b>	RJ45

<b>5100-FXO</b>	
ITU-T Standard	G.712, G.713, G.714
Line resistance	600Ω
Line distance	2km
Ports	8-port
Caller ID	Supports DTMF, FSK Standard
Connector	RJ45

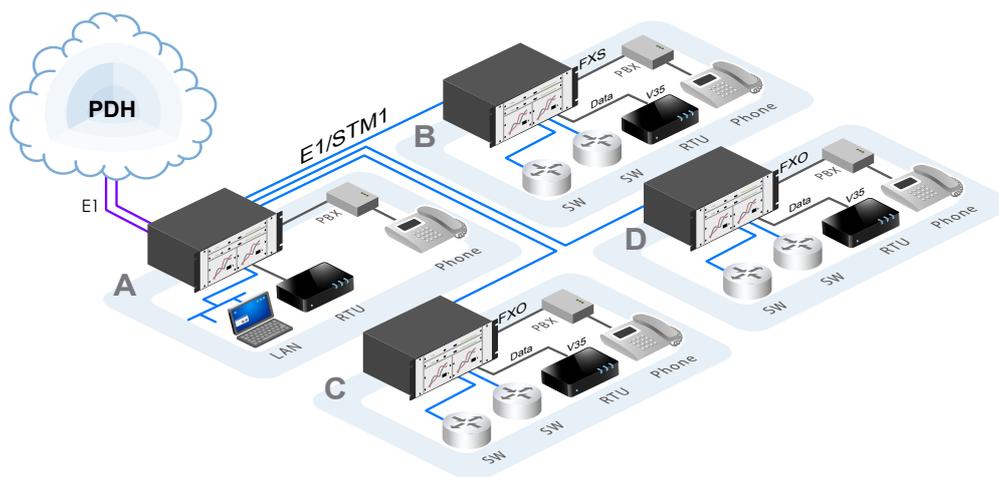
<b>Electrical &amp; Mechanical</b>	
Dimensions	350 × 440 × 187 mm (D x W x H)
Environmental	Operating: 0~60°C Storage: -25~70°C Humidity: 10~90%, non-condensing
Power	AC 220V : 165~265V, 50~60Hz AC 110V, AC 220V : 90~265V, 50~60Hz
Power Consumption	< 90W

## Application

### Connection with PBX (Private Branch Exchange)



### The extension and expansion of DDN (Distributed Data)



## Ordering Information

Model Name	Type	Description
iSAP5100-CH	Chassis	4.5U 19" 18-slot Chassis
iSAP5100/AC	Power	AC Power plug-in module (90 to 250 VAC)
iSAP5100/DC	Power	DC Power plug-in module (±36 to ±76 VDC)
iSAP5100-8E1R	Main E1 card	8 channels Main-E1 LRU card: Fractional E1 RJ45
iSAP5100-16E1R	Main E1 card	16 channels Main-E1 LRU card: Fractional E1 RJ45
iSAP5100-MS-DM-96	CPU-card	CPU card for 96x E1
iSAP5100-MS-DM-155	CPU-card	CPU card for STM-1
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-RS-232	RS-232 card	6 channels RS-232 interface card 38.4kbps, Low speed: 64kbps or 128kbps sync DEC
iSAP5100-RS-232C	RS-232 card	6 channels RS-232 (V.24) interface card, Low speed: 128kbps, 19.2kbps Async with Multi-Clock function
iSAP5100-ET100	FE Card	4 channels Ethernet (10/100Base-TX) interface card (v4.0)
iSAP5100-G.703/64K	G703/64K Card	4 channels G703 64K interface card (v4.0)
iSAP5100-V35	V35Card	4 channels Nx64K V.35 card with DB68 to 4 x M34 cable

Chassis  
**iSAP5100** -    
 Example: iSAP5100 - CH

Card Type  
**iSAP5100** -      
 Example: iSAP5100 - 8E1R