

SX-200 IP Communications Platform

Advanced, affordable communications system for small business



Controllers

Specification	SX-200 ICP AX CONTROLLER
Maximum desktop stations	536
Maximum IP phones	248
Maximum TDM devices	288
Maximum embedded digital trunk modules	1
Maximum T1 modules	1 x single T1 module
Maximum ACD agents	40 IP
Maximum consoles	11
Maximum Dual or Quad DSP modules	1 DSP module
Maximum echo cancellation channels	128 maximum
Maximum G.729a compression channels (every 8 channels requires a DSP)	32
Maximum Network Service Units (NSUs)	N/A
Maximum Quad Copper Interface Modules (CIMs)	N/A
Maximum Analog Service Unit IIs (ASU IIs)	N/A
Maximum number of Peripheral (Digital) Bays	N/A

Controllers (cont'd)

Specification	SX-200 ICP AX CONTROLLER
Maximum number of Dual	N/A
Fiber Interface Modules (FIMs)	30 IP channels Max 100 systems / network
IP networking Maximum voice mail ports	20
Maximum embedded voice mail boxes	748
Shipped with (standard)	<ul style="list-style-type: none"> » 1 RS-232 port » 1 empty MMC slot » DHCP Server » 4 Voicemail ports » 10 / 100 / Base – TX LAN port

Hardware Option Modules

Specification	SX-200 ICP AX CONTROLLER
Analog Option Module Provides additional:	N/A
DSP modules	Dual or quad expand voicemail, conferences, compression
Digital trunking	Dual or combo module
Dual Power Supply	Yes

Support for Mitel® IP Phones

- *Mitel 5304 IP Phone*
- *Mitel 5212 IP Phone*
- *Mitel 5324 IP Phone*
- *Mitel 5330 IP Phone*
- *Mitel 5340 IP Phone*

Support For IP Peripherals

- *Mitel IP Programmable Key Module (PKM) – 12 buttons*
- *Mitel IP Programmable Key Module (PKM) – 48 buttons*
- *Mitel Gigabit Ethernet Stand*
- *Mitel Cordless (DECT) Module and Accessories*

Embedded Applications Embedded Voicemail with Auto Attendant

- *AX: 4 Auto Attendant or VM simultaneous sessions standard, expandable to 20 sessions*
- *20 expandable up to 750 mailboxes*
- *450 storage hours (with hard drive)*
- *Up to 100 messages per mailbox*
- *Two concurrent system languages*
- *Multi level Auto Attendant options – eight single digit (unlimited multi-digit), maximum of 10 levels*
- *Hospitality*

Embedded ACD

- *Up to 999 Agent IDs*
- *Up to 100 IP logged-in agents at once*
- *Up to 99 paths*
- *Up to 50 agent groups*
- *Up to 99 agents per agent group*

IP Networking

- *Supports G.711 and G.729 compression*
- *Connect up to 100 other network nodes*
- *Total of 30 IP network connections to / from any one node*
- *One IP network license required per controller*

Partial List of Supported Features

- *Account Codes*
- *ANI / DNIS*
- *Auto Attendant*
- *Automatic Route Selection (ARS) Automatic Call Distribution (ACD)*
- *Broker's Call (Station Swap or Transfer with Privacy) Busy Lamp Field (BLF)*
- *Call Forwarding*
- *Call Logging*
- *Call Monitor*
- *Call Park and Page*
- *Callback – Busy or No Answer*
- *Campon*
- *Centralized Attendant*
- *CENTREX*
- *CLASS (analog / digital)*
- *Class of Restriction (COR)*
- *Class of Service (COS)*
- *Conference*
- *Direct Inward Dial (DID)*
- *Direct Inward System Access (DISA)*
- *Direct Station Page / Busy Lamp Field (DSS / BLF)*
- *Emergency Calls (911) Reporting to PSAP*
- *FAX Tone Detection*
- *Feature Keys*
- *Flash Control*
- *Group Listen*
- *Hold*
- *Hold and Page*
- *I Hold / You Hold*

- Languages
- Line Appearances
 - Prime Line
 - Key Line
 - Multicall Line
 - Direct Trunk Select
- Messaging – Advisory
- Music on Hold (MOH)
- Night Service
- Off-Hook Voice Announce
- Off Premises Extension (OPS)
- Paging
- Personal Speed Call
- Pickup Groups
- Phone Twinning
- Q.SIG
- Recorded Announcement Device (RAD) Support
- Record-a-Call
- Redial
- Secretarial Line
- SMTP Client
- Speed Call Key
- Station Message Detail Recording (SMDR)
- Sub-attendant
- Tenanting
- Transfer
- Trunk Answer From Any Station (TAFAS)
- Uniform Call Distribution
- Voicemail Support
- Whisper Announce

Digital Trunk Connectivity

UNIVERSAL NSU (MX CONTROLLER ONLY)

- Connects to controller via a FIM or CIM port
- Each NSU supports up to two digital links
- Both links in an NSU must run the same protocol
- Provides T1 CCS PRI (NI2 Standard, NI2 5ESS, NI2 GTD5) and QSIG (QSIG ISO), DMS 100/250, 4ESS

DUAL EMBEDDED DIGITAL TRUNK MODULE*

- Each module has two T1 trunk interfaces (links)
- Provides PRI and /or T1 / D4 protocol through the controller (no NSU required)

*Does not support: Min/Max, NFAS, D-Channel Backup or TDM XNET (Hybrid XNET is supported)

SINGLE EMBEDDED DIGITAL TRUNK MODULE

- Provides PRI or T1 / D4 protocol through the controller (no NSU required)*

*Does not support: Min / Max, NFAS, D-Channel Backup or TDM XNET (Hybrid XNET is supported)

Analog Connectivity

ANALOG SERVICE UNIT II (ASU II)

- Chassis with 2 line card slots
- Two line card variants:
 - 24 ONS Line Card
 - 4 LS + 12 ONS Combo Line Card
- Connects to the controller via CIM

Dimensions

Specification	SX-200 ICP CONTROLLER
Height	AX – 12.25 in (31.1 cm) (7U)
Width	AX – 17.76 in (45.1 cm)
Depth	AX – 14.6 in (37.1 cm)
Weight	AX – 39.86 lb (18 kg)

Operational Environment

Specification	SX-200 ICP CONTROLLER
Temperature	41° to 122°F (5° to 50°C)
Humidity	40% – 90% relative humidity, non-condensing
Max Heat Dissipation (Fully Loaded)	750 BTUs per hour
Air Flow	46 cubic ft / min at max output of fans
Acoustic Emissions	Max 50dBA continuous, 75 dB intermittent (<10% duty cycle)

Conversion factors: one watt is equal to 3.412 BTUs per hour. One ton of refrigeration is equal to 12,000 BTUs per hour or 3.516 Kilowatts, and 0.75 kilowatt-hour is equal to one ton of refrigeration.

System Input Power Requirements

Specification	SX-200 ICP CONTROLLER
Input / Disconnect	IEC320 – C14, Class 1 AC Receptacle
Input Voltage / Frequency Rating	100 – 120 VAC, 50/60Hz
Maximum Input Power	AX – 300W, CX / CXi – 300W, MX – 100W
AC Source Range	90 – 264 VAC, 47 – 63 Hz

Glossary

ACD	Automatic Call Distribution
ASU	Analog Services Unit
CIM	Copper Interface Module
CLASS	Custom Local Access Signaling Services
DID	Direct Inward Dial
DNI	Digital Network Interface
DSP	Digital Signal Processor
FIM	Fiber Interface Module
ICP	IP Communications Platform
IP	Internet Protocol
ISDN	Integrated Services Digital Network
LS	Loop Start Trunk
MMC	Mitel Mezzanine Card
MOH	Music on Hold
NFAS	Non-Facilities Associated Signaling
NSU	Network Services Unit
OPS	Off Premises, long loop analog PBX ports
PRI	Primary Rate Interface, ISDN
VM	Voice Mail