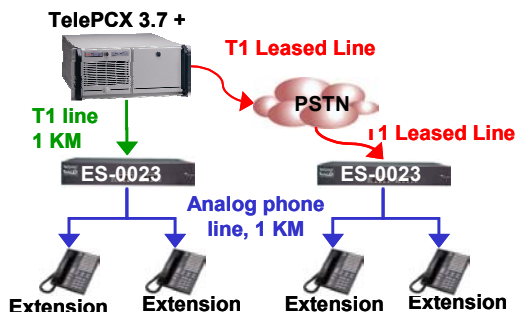# *ES-0023*

23 Ports Extension Switch

ES-0023 is an Extension Switch Box that provides 23 extension ports. The standalone architecture and compact design makes the ES-0023 reliable, hot swappable and easy to install. Using ES-0023, TelePCX can support up to 460 extensions in one chassis, or more extensions using stack up architecture. Furthermore, the loop distance supported by an T1 line between the ES-0023 and the server can be extended to 1000 meters. The physical analog extension lines connected to the ES-0023 can be extended an additional 1000 meters. Therefore, by implementing the ES-0023, the physical extensions can be located up to 2,000 meters away from the TelePCX server. If the ES-0023 and TelePCX server are connected through an T1 leased line provided by the Telephone Company, the ES-0023 and the extension lines can be physically extended as far as the Telephone Company can support. Thus, the remote department/branch can have the same PBX features as that of the main office TelePCX, and there is no need for remote departments or branch offices to equip the extra PBX systems or VoIP Gateway for external communication and internal toll savings.

FEATURES & BENEFITS

- Provides 23 extension ports per ES-0023 box
- Ready to connect to TelePCX server. Each TelePCX chassis can support up to 20 ES-0023
- Supports Distant Extension Connection (Max. 1Km) when direct wiring to TelePCX
- Cross-city connection through T1 lease line
- On-line Firmware upgradable
- Hot-swappable
- Cost-effective and easily manageable for extensions setup and extending.

TECHNICAL SPECIFICATIONS

Extension Interface:
- Loop start
- Standby Voltage: -62V
- Loop current: 25 mA
- Interface impedance：600 ohms
- Frequency response: 200 -- 3400 Hz
- Ringing Voltage: 45Vrms (20 Hz)
- Loop Range：0~200 ohms
- Connector: two sets Modular RJ-45 phone jack x 4
- Pickup/Hangup/Flash detection; Flash duration selection
- Caller ID Transmission: DTMF or FSK (Bellcore GR-30-CORE)(Note 1)
- Visual Message Indicator : Bellcore FSD 01-02-2000 (Note 1)

T1 Interface:
- Nominal Bit Rate: 1544 Kbit/s
- Frame Format: ESF
- Line Code: B8ZS
- Voice Channel: a-law/u-law compression
- Connector: Modular RJ-45 phone jack x 2, at rear panel of ES-0023 for direct wiring to TelePCX server or connection to a remote TelePCX through an T1 line.
- Load Impendence: $100\Omega\pm5\%$, Balanced.

Indicator:
- Red Indicator: Reset operation indicator
- Green Indicator: Power indicator

Reset Switch
- Reset switch at the front panel

Power Supply :
- Input Voltage,Frequency：AC 90V~240V, 50~60 Hz
- power consumption：115W(max.)
- Input Inrush Current：20A at 115Vac ,40A at 230Vac (max.)

Dimension :
- Dimension: 438mm×173mm×44mm(W/D/H)

- For departments/branches locate within 2 Km (such as in different buildings nearby) from the TelePCX server (No leased line required)
- Used to extend PBX functions (physical extensions) from TelePCX server to remote department/branch as far as possible through the connection of T1 leased line clear channel.
- To simplify the wiring for offices need 460 or more extensions