

ITFX - Integrated Tactical Field Exchange

State-of-the-art multi-Interface Integrated Tactical Field Exchange (ITFX) is based on digital PCM/TDM and IP switching technology. It employs non-blocking circuit switching concept and interfaces with strategic and tactical communication networks through exchange trunk lines, E1/PRI interface and IP trunks/lines.



ITFX - Front



MDF

ITFX has radio inter-op functionality supporting HF/VHF/UHF radios. Radio nets can communicate with subscribers (Analogue/IP) connected to the system. VFD display mounted on the front panel for displaying system health and running diagnostics. Keypad on the front panel provides easy access to programming of the system.

Application

- The equipment is design to meet modern communication needs of Defence and CAPF(Para Military) in varied terrain.
- Rapid deployment of communication needs in case of Disaster Forces, Special Operations etc.

Functionality

- Supports up to 128 ports consisting of CB, LB, FXO, E1/PRI, SIP trunk and SIP subscriber.
- E1/ PRI Interface for connection to strategic or other tactical networks.
- External connection unit (MDF) for two wire analogue lines.
- MIL Grade Connectors.
- Field Programmable 2 wire interface for FXO/FXS/TWT/Magneto connectivity.
- Modular design for ease of maintenance.
- Supports redundancy of CPU and PSU Cards for greater survivability
- Operates on 230V AC or 12V/24V/48V DC Supply.
- HF/VHF and UHF CNR interface for inter-op.
- Support SIP server for VoIP Phones.
- Built-in Float-Cum Boost charger for charging 12/24/48V battery Bank.
- Built-in Operator Console with handset for call and service handling.
- Tailored card configuration possible.
- Protection against transients on each line.
- Power On Self Test (POST) and Built in Test Equipment (BITE) up to card level.
- Light weight and man portable.
- Day-night readable vacuum fluorescent display (VFD).
- Web based Graphical User Interface (GUI) for management.

ITFX – IP Tactical Exchange

Specifications

System and Maintenance

Modular concept/Universal Port Architecture

Efficient Thermal Management

Auto-sensing of connected battery voltage for battery charging (12/24/48V)

Power on Self Test (POST)

Built in Test Equipment (BITE)

Acoustic and display/ reporting of alarms

Flexible numbering scheme

Built-in redundancy CPU and PSU Control Cards

Subscriber Services

Auto Call Back	Hotline
Call Forward	Do-Not- Disturb
Call Hold and Transfer	3 Party Conference
Call Pick-up	Call Barring
Abbreviated Dialling	SIP Call
Direct inward Dialling (DID)	Radio Call
Direct outwards Dialling (DOD)	Auto Call Distribution (ACD)

Interface Cards

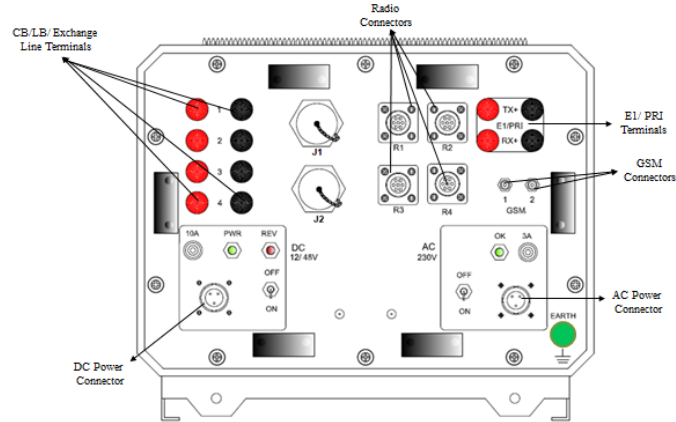
UTC4 (2-Wire analogue)	4 lines
UTC12 (2-Wire analogue)	12 lines
IPC (IP card)	1 x LAN & 1 x WAN Port
E1/PRI	1 Port (30 lines)
RIC (Radio Interface Card)	2 Radio nets (HF/VHF/UHF)

Dimension / Weight

Height	237mm
Width	351 mm
Depth	501 mm
Weight	>18 kg

Power Supply

AC Operation	140V-265V AC
Battery Operation	12-55 V
Power Consumption	0.7W/Line



ITFX Rear View

Operator Console

- Built-in Operator Console
- Subscriber and service configuration
- Call assistance for subscribers
- Trunk access handling
- Self test functions
- 64 Party Conference

Interfaces

- Analogue Trunk Lines
- Analogue Telephone Lines (CB or LB)
- Digital E1/ ISDN PRI
- IP Interfaces
- CNR Radio Interfaces
- GSM Interface

Protocols and Standards

DTMF and Loop Dial	E1 CAS, R2 MFC
PRI CCS, PRI (QSIG)	VOX/ VMR/ COR
Codec Support	G.711, G.723, G.729

References

Temperature and Mechanical Stress	JSS55555
EMI/EMC	MIL-STD-461E
Lightening	EN-61000-4-5

This publication is not to be regarded as a complete system specification, or to be used as a contract document. We reserve the right to change the design or specifications without prior notice.