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.

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ITFX – IP Tactical Exchange

Specifications

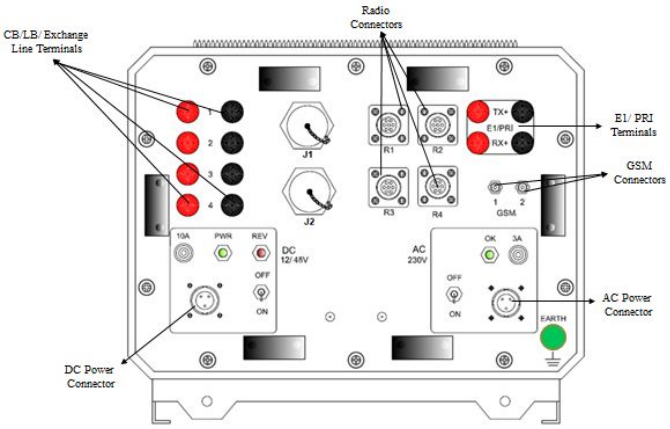
System and Maintenance
Modular concept/Universal Port Architecture
Efficient Thermal Management
Auto-sensing of connected battery voltage for battery charging (12/24/48V)
Power on Self Test (POST)
Built in Test Equipment (BITE)
Acoustic and display/ reporting of alarms
Flexible numbering scheme
Built-in 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

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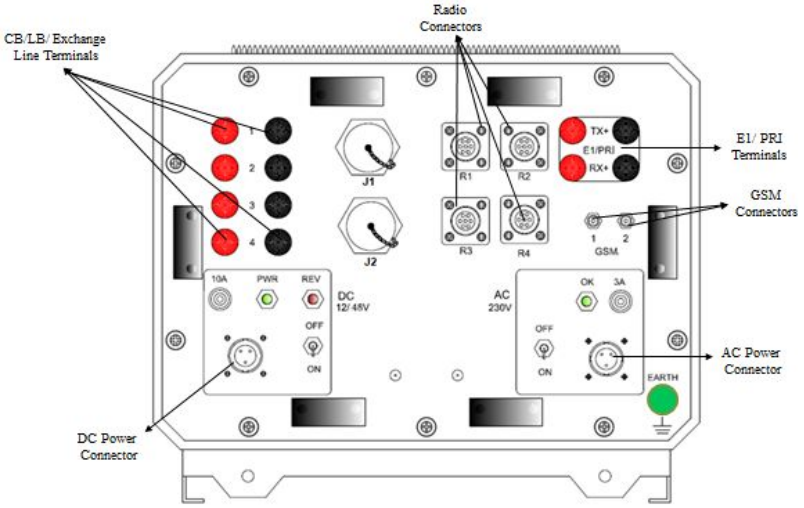
Radio
Connectors
CB/LB/ Exchange
Line Terminals
E1/ PRI
Terminals
GSM
Connectors
AC Power
Connector
DC Power
Connector
1
2
3
4
J1
J2
R1
R2
R3
R4
TX+
E1/PRI
RX+
1
2
GSM
10A
PWR
REV
DC
12/ 48V
OFF
ON
AC
230V
OK
3A
OFF
ON
EARTH