



# CORNET SWITCHING SYSTEMS

## TCT 7100J

### Tactical Communications Terminal



The TCT-7100J is a Voice-over-Internet-Protocol (VoIP) tactical communication terminal designed for non-secure communication environments. With the TCT-7100J, users can make calls to remote radios, intercoms, and non-secure telephones simultaneously in through a Cornet Technology Tactical Voice Communication System (TVCS) MR/L and Omni conference switch.

The front of the TCT-7100J contains two LEMO connector jacks for operator and supervisor headsets. The unit accepts various vendors headsets which can be mono or stereo (with stereo supporting both dynamic or Electret microphones). Headsets not provisioned with LEMO plugs require adaptor cables. The front of the TCT-7100J also has a dual-stack 3.5 mm audio jack. The bottom audio jack gives users the flexibility to listen to any or all communications channels (2 channels from the TVCS MR/L; 2 channels from the OMNI) from either the left or right side of the headset.

The top audio jack is used to record monitored audio in an analog format. Push to talk (PTT) signals are received via the front panel audio jacks through PTT adapters.

Four Ethernet connectors are offered on the rear of the unit for control and voice network connectivity. Each network gets a fiber and a copper connection. The fiber module supports 100 Mbps SFP. A DB-9 connector, also on the rear panel, supports PTT foot pedals for both operator and supervisor.

Control of the TCT-7100J is through the Cornet Technology CIP-7100, a Human Machine Interface (HMI) running on a PC. This HMI offers functions such as call initiation, call termination, volume control, as well as a variety of other required functions. The HMI can be easily modified to fit the requirements of the application.

#### Key Features

- Black only communications
- VoIP and TDM
- Ethernet LAN connectivity for voice and control
- Fiber and Copper Ethernet connectors
- Operator and Supervisor PTT
- Mono and Stereo Headsets
- Analog audio monitoring
- Supports variety of headsets through specialized adapter cables
- Electret and Dynamic microphones supported
- Noise canceling MIC support for most major mono and stereo headsets

## Specifications

### Connectors

#### Front

Operator: 1 each, 8-pin LEMO  
Supervisor: 1 each, 8-pin LEMO  
Audio: Dual stack 3.5 mm audio connector  
- one for listening and one for recording/monitoring  
Serial: DB-9 for debugging

#### Rear

PTT Foot Pedal: 1 each, DB-9 (accommodates 2 foot pedals)  
Ethernet: 2 RJ-45  
2 fiber  
Power: 1 each, 2-Pin DC Power Socket

### Networking

Ethernet: Copper and Fiber (SFP multimode, 100 Mbps)  
IP Addressing: One static IP address, configurable by administrator.  
Network Protocols: CES, SIP, RTP/RTCP, and TCP/IP  
File Transfer: New firmware download via TFTP File Transfer Tool developed by CTI  
Reset Recovery: The recovery time from a Reset will be less than 15 seconds, after which the user must log back onto the unit.

### Serial Port

Baud Rate: 115200 no flow control

### Electrical

Power Consumption: 1.5A @ 12VDC (typical)  
Power Supply: 18 Watts

Mechanical Enclosure: Heat dissipates through the enclosure

### Dimensions (without wings):

10.03" W x 14.20" D x 2.00" H  
25.48 W x 36.07 D x 5.08 H (cm)

Weight: ~5 Lbs (2.27 Kg)

### Environmental

Operating Temperature: 0° C to +50° C  
Storage Temperature: -50° C to 100° C  
Humidity: 98% non-condensing  
Altitude: Up to 3050m above sea level  
Shock & Vibration: MIL-STD-901D Grade A, MIL-STD-167-I

