

# Multi-Channel Data Fiber Optic Modem

## TYPICAL APPLICATIONS

- Interconnect tactical communication assemblages, including:
  - Radio terminals
  - Radio repeaters
  - Tactical switches
  - Circuit switches
  - Tactical multiplexers
  - Satellite support radios
  - TACC shelters
- Tactical communication systems
- Down the hill links
- Intra-node cabling
- Dispersed command post
- Disaster relief

## FEATURES

- 110 - 240 VAC, 50 - 60 Hz
- Power consumption is less than 20 watts
- Automatic rate sensing
- Rack space required - 1 RU
- Weight 4.6 lbs (2.1 kg)
- Operating temperature -40 to +85° C
- Storage temperature -57 to +85° C
- MD1272/G compatible

## BENEFITS

- No operator interface required
- Redundant DC power to each channel
- Low power
- High reliability
- Full functional test and environmental screening on every unit
- Ruggedized mechanical package



The Multi-Channel Data Fiber Optic Modem provides optical links between mobile shelter equipment and remote sites for secure tactical communications. Utilizing the Internet Protocol (IP) sections of this interface at each end of the multi-mode fiber optic cable, the modem converts between electronic and optical transmission modes for repeater-less communication at distances of up to 2 kilometers. The IP section of the Multi-Channel Data Fiber Optic Modem automatically configures itself for 10 or 100 Mbps operation. The three 10/100 interfaces connect to digital communication equipment through RJ-45 electrical connectors. The optical interface is accomplished via three sets of ST connectors (RX and TX each channel).

The MD1272/G functionality section of the Multi-Channel Data Fiber Optic Modem is a major unit of the Fiber Optic Transmission System (Long Haul). The FOM performs electro-optical conversion for full duplex transmission of digital communications signals between tactical shelters and remote sites using tactical fiber optic cable assemblies instead of CX-11230 coaxial cables. DB25M and DB25F connectors provide the electrical interface for either DTE or DCE RS-530 respectively. NRZ signals from 72 kbps to 18.72 Mbps are accommodated without reconfiguration. The electrical Conditioned Diphase link is accomplished via two female 50 ohm BNC connectors (TX and RX). Conditioned Diphase signals from 72 kbps to 4.608 Mbps are accommodated without re-configuration. The electrical interface for the MD1272/G functionality section is switch selectable between Conditioned Diphase (CDP) and Non-Return to Zero (NRZ clock and data). The optical link utilizes two ST connectors (RX and TX).

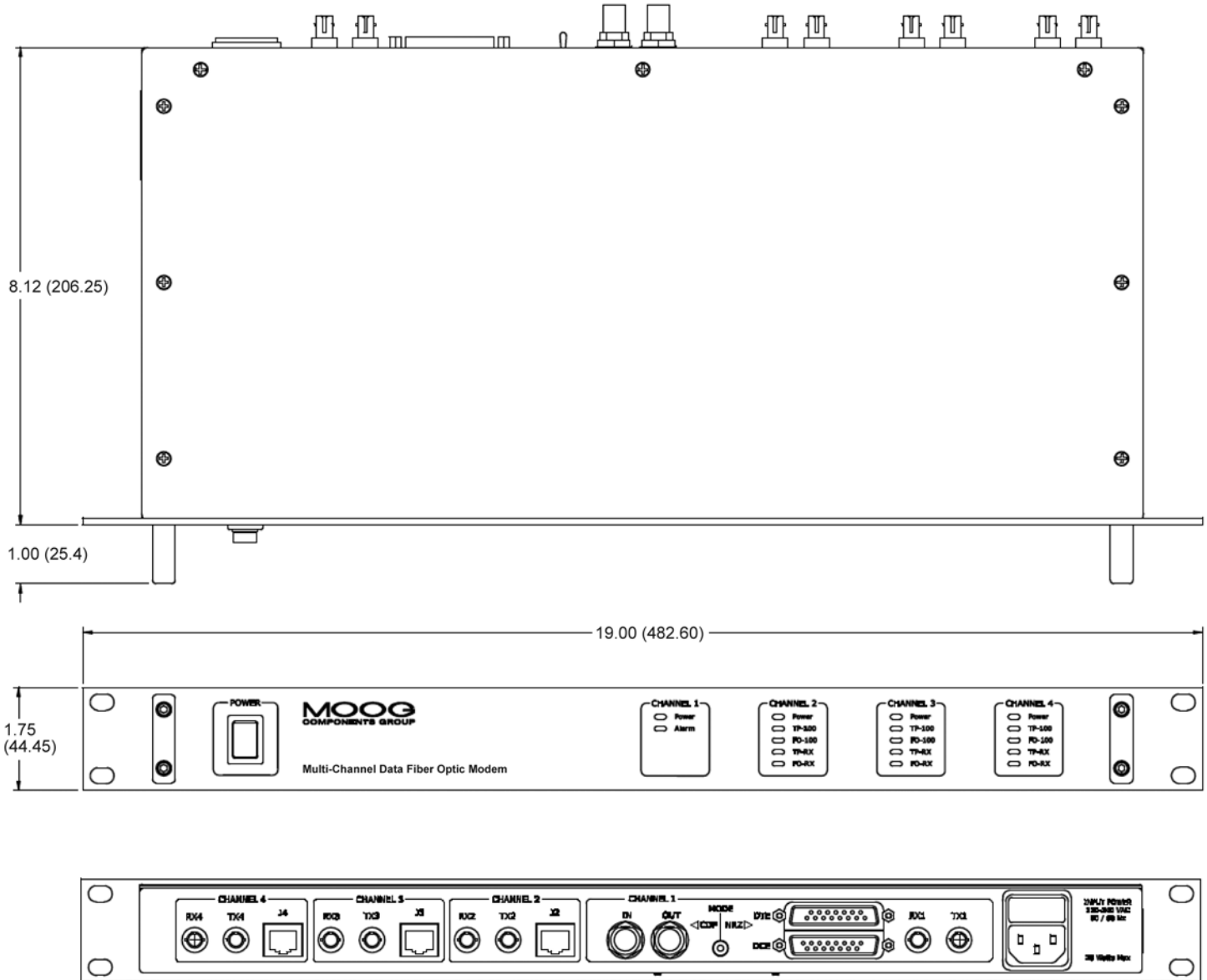
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## PHYSICAL CHARACTERISTICS

- Size:

	Case Height	Case Width	Case Depth
English:	1.75 inches	19 inches	8.12 inches
Metric:	44.45 mm	482.60 mm	206.25 mm

- Weight: 4.6 lb (2.1 kg)
- Rack Space: 1 RU



Dimensions are in inches (mm)

## ACCESSORY ITEMS

- AC power cord; 110 - 240 VAC, 50 - 60 Hz

Specification and information are subject to change without prior notice.  
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