COMTECH
SYSTEMS, INC ™

Modular Transportable Transmission System

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Comtech Systems' **Modular Transportable Transmission System (MTTS)** is the first modular, rapidly deployable, transit cased troposcatter system. Modularity means that only the cases needed to meet the mission requirements are deployed, saving cargo space, reducing logistical support and manpower.

Utilizing the industry leading military CS6716A or new CS67 series modems, the **MTTS** provides a capacity of up to 50 Mbps. This flexible, transit case-based system can be deployed in dual and quad-diversity configurations and is interoperable with many existing 4.4 GHz to 5.0 GHz troposcatter terminals. These feature-rich modems include Turbo Product Coding (TPC), enhanced variable rates from 576 kbps to 46 Mbps with Forward Error Correction (FEC), and rates up to 50 Mbps without FEC.

The communications link performance is further enhanced with Automatic Power Control and a unique Auto Coding Rate (ACR) function. In severe link conditions, ACR will reduce the transmit rate to maintain performance and will return to the nominal transmit rate when link conditions permit.

The **MTTS** can be easily combined with existing antennas or new Comtech supplied antennas for deploying angle, frequency, or space diversity systems. When combined with fly-away or trailer mounted antennas, the **MTTS** is the ideal Beyond Line-of- Site troposcatter system for tactical Military, Disaster Recovery, and Emergency Restoral Communications anywhere in the world.

Each system comes with a quad-diversity frequency converter and at least one 500 W solid-state power amplifier (SSPA) RF transit case for dual-diversity deployment. Multiple RF transit cases are supplied with systems requiring greater performance using quad-diversity.

MTTS

Standard Features

- Up to 50 Mbps data throughput
- Troposcatter optimized Forward Error Correction
- Ethernet and Serial Data Interfaces
- Redundant modem, converter, and power supply
- Multiple soft-fail modes
- Adaptive link power control to reduce power consumption
- Easy-to-use Graphical User Interface for local and remote monitoring and configuration
- Built-in Path Analysis Tools (optional)
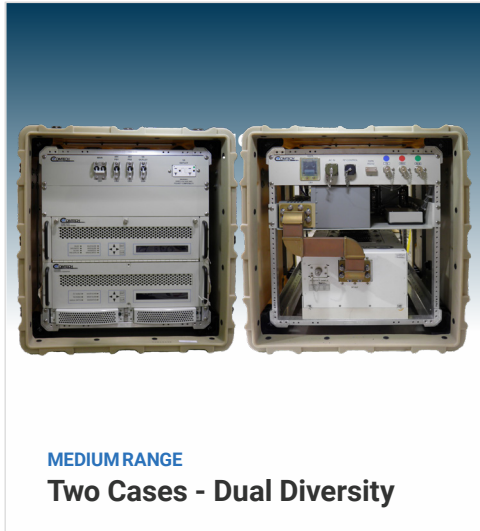- MTTS can be used with fixed, transportable, and fly-away troposcatter antennas
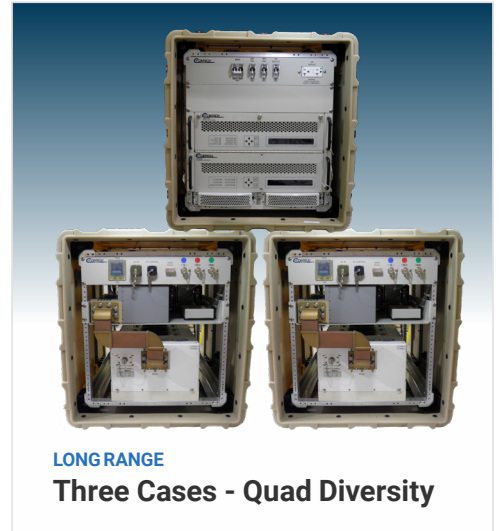
www.comtechsystems.com

MTTS Modularity

SHORT RANGE
One Case - Line-of-Sight

MEDIUM RANGE
Two Cases - Dual Diversity

LONG RANGE
Three Cases - Quad Diversity

Modem Converter Transit Case

Case Dimensions (11RU)	
Height	25.5 in. (64.8 cm)
Width	24 in. (61 cm)
Length	38.5 in. (97.8 cm)
Weight	168 lb (76.2 kg) 260 lb (117.9 kg) (with dual ECU
Environmental	
Operating temperature	-40°C (-40°F) (After 2 hour warm-up) to +55°C (+131°F)
Storage temperature	-50°C (-58°F) to +70°C (+158°F)
Humidity operating	Up to 100% non-condensing
Humidity storage	Up to 100% non-condensing

RF Transit Case

Case Dimensions (11RU)	
Height	25.5 in. (64.8 cm)
Width	24 in. (61 cm)
Length	38.5 in. (97.8 cm)
Weight	220 lb (99.8 kg)
Environmental	
Operating temperature	-40°C (-40°F) to +55°C (+131°F)
Storage temperature	-50°C (-58°F) to +70°C (+158°F)
Humidity operating	Up to 100% non-condensing
Humidity storage	Up to 100% non-condensing

MTTS

Features	
Frequency range	4.4 GHz to 5.0 GHz in 100 kHz increments
Transmit power	57 or 60 dBm rated power
RF Transmit/Receive interface	Type-SC
Data interface	100 Base T Ethernet, RS530/422
Data rate	576 kbps to 46 Mbps with FEC, 50 Mbps without FEC
Forward error correction	Turbo Product Code (TPC) user selectable 0.95, 7/8, 3/4, 5/8, 1/2
Monitor & control	Modem, FCS, and SSPA (GUIs available on systems equipped with integral laptop PC)
Electrical	
Power Input	
Modem case	100 VAC to 240 VAC, 50 Hz to 60 Hz
RF case	180VAC to 264 VAC, 47 Hz to 63 Hz
Power Consumption	
< 7050 W (for a Quadruple Diversity system with dual ECUs and 48VDC Antenna)	

Comtech offers a full range of MTTS-compatible fixed, transportable, and flyaway antenna options.