

MODULARITY

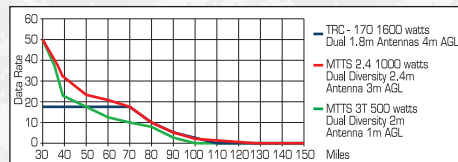
- Modem Converter Case for Line of Sight
- Modem Converter + 1 RF section for BLOS and medium range tropo
- Modem Converter + 2 RF sections for BLOS and long-range tropo
- Can be paired with any C-Band Troposcatter Antenna

Electrical Characteristics

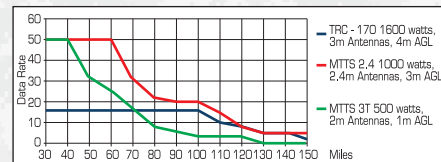
Frequency Range	4.4 GHz to 5.0 GHz 100 kHz steps
Transmit Power	+60 dBm @ P _{rated} at SSPA output flange
RF Transmit/Receive Interface	Type-HN
Data Interface	100 Base T Ethernet or RS530/422
Data Rate	.576 Mbps to 50 Mbps
Forward Error Correction	Turbo Product Code (TPC) user selectable 0.95, 7/8, 3/4, 5/8, 1/2
Monitor & Control	GUIs available on system equipped with integral laptop PC
Power Input	
Modem/Converter Transit Case	100VAC to 240VAC, 50 Hz to 60 Hz
RF 1 KW SSPA Transit Case	180VAC to 264VAC, 47 Hz to 63 Hz
RF Filter Case	Powered by Modem/Converter Transit Case
Power Consumption	9000 W (for a Quadruple Diversity system with dual ECUs and 48VDC Antenna)

Physical/Environmental

Modem/Converter Transit Case	
Case Dimensions	L 38.5 in. x W 24 in. x H 25.5 in. (11 RU)
Weight	168 lb
Temperature:	
Operational	-40°C (-40°F) (After 2 hour warm-up) to +55°C (+131°F)
Storage	-50°C (-58°F) to +70°C (+158°F)
RF SSPA Transit Case	
Case Dimensions	L 38.5 in. x W 24 in. x H 18.7 in. (7 RU)
Weight	127 lb
Temperature:	
Operational	-40°C (-40°F) (After 2 hour warm-up) to +60°C (+140°F)
Storage	-50°C (-58°F) to +70°C (+158°F)
RF Filter Transit Case	
Case Dimensions	L 38.5 in. x W 24 in. x H 15.2 in. (5 RU)
Weight	119 lb



Dual Diversity
Performance Comparison



Quad Diversity
Performance Comparison

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COMTECH
SYSTEMS, INC.
The World Leader in DIGITAL TROPOSCATTER SYSTEMS

TACTICAL TROPOSCATTER:
THE MODULAR TRANSPORTABLE TRANSMISSION SYSTEM (MTTS)

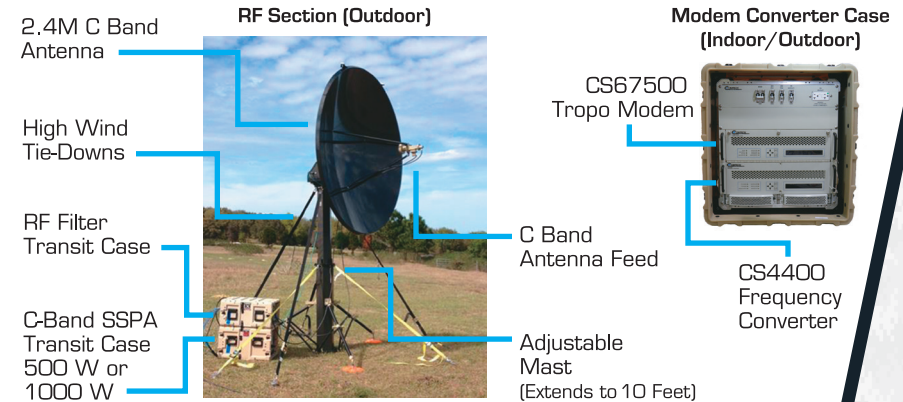


Comtech Systems, Inc. is the world leader in troposcatter communications, with systems deployed globally for both commercial and military applications. Over 40 years of continuous development and innovation in troposcatter technology ensure that Comtech troposcatter equipment is designed from the ground up specifically for troposcatter applications, providing the highest level of performance in the industry. Comtech troposcatter equipment is currently operating in Europe, Africa, the Middle East, Asia, and Latin America, in a variety of environments ranging from the extremes of the arctic and deserts, to maritime and tropical settings.

TROPOSCATTER APPLICATIONS

- High throughput intra-theater communications
- Air Defense – Radar Data and Fire Control
- Emergency Communications Restoral
- Inter-island and Maritime Communications
- Obstructed Short Range Communications

MTTS System Elements



TROPOSCATTER FEATURES & ADVANTAGES

- No recurring cost for usage or reliance on 3rd party equipment or services.
- Virtually undetectable delay from transmission to reception. Latency via troposcatter is typically <20 ms, making it ideal for applications such as Patriot Battery firing solutions and tactical command and control for battlefield management. (In comparison, VSAT links can have a round-trip delay of more than 500 ms).
- Removes need for multiple LOS communications relay points.
- Point-To-Point nature makes troposcatter far less susceptible to jamming than VSAT links.
- Installation in 30 min. for up to 50 Mbps communications links between two points separated by up to 240 miles. (Range depends upon communications path, amplifier power, antenna size, and desired throughput. Comtech has experience establishing links up to 240 miles.)

RECENT DEPLOYMENT HIGHLIGHTS

- 100 mile / 50 Mbps Tropo link Operationally Proven at White Sands Missile Range in Feb. 2015 (PM-WIN-T Increment 1 and the Patriot Program Office)
- U.S. PATRIOT batteries – Global tropo deployments
- Bold Quest 15.2 – U.S. PATRIOT Tropo link
- NATO Trident Juncture 2015