TCT300



Rapidly deployable troposcatter terminal on a single-axle trailer

CS41000

The Transportable Communications Terminal Light (TCT) is completely self-contained with a three meter angle diversity antenna on a light tactical trailer (LTT) designed to be towed by a HMMVW or similar vehicle. The TCT includes automated antenna pointing, a four-port angle diversity feed subsystem for quad diversity using only one antenna, 210 Mbps hot standby modem, quad diversity radio, and dual 500W or 1000W solid state power amplifiers (SSPA). The TCT antenna pointing uses a simple, automated process to quickly locate and achieve signal lock. The GPS receiver and a flux gate compass allow the antenna control unit (ACU) to calculate and then rotate the antenna to an initial azimuth and elevation pointing angle. The automated pointing capability enables fast, accurate link activation. The TCT antenna is equipped with Comtech's innovative four-port angle diversity feed subsystem. This innovative antenna subsystem provides quad diversity operation with just one antenna, rather than two. Thus, rapid deployment and solid link performance with quad diversity can be obtained at significantly lower life cycle cost than traditional systems that rely on two antennas.

Key Features:

- 210 Mbps Data Rate
- 150km + Range
- Setup and Link Acquisition in Less than 1 Hour
- Less than 20ms Latency
- No Ongoing Costs for Data
- Voice over IP Engineering Orderwire
- QUICK-Path analysis program
- Equipment monitor & control software
- Optional 8 kW Uninterruptable Power Supply



Technical Specifications:

Frequency Range 4.4 - 5.0 GHz

Diversity Quad diversity, 4 receive, 2 transmit

Antenna Size 3.0 m, carbon fiber

Radio Quad diversity, fully redundant

Multipath mitigation Corrects for multipath dispersion up to 2 σ/T=3.0

AC Power:

AC Voltage 180-264 VAC Frequency 47 to 63 Hz

Dimensions:

Stowed length 211 in. (536 cm)
Stowed width 95 in. (242 cm)
Stowed height 102 in. (260 cm)
Deployed length 223 in. (567 cm)
Deployed width 189 in. (481 cm)
Deployed height 223 in. (567 cm)

Enviromental:

Operating Temperature -40°C (-40°F) to 60°C (140°F) -40°F to 140°F

Storage Temperature -67°F to 158°F (-55°C to 70°C)

Wind Speed Operational up to 45 mph without tie downs

Humidity Up to 100% condensing
Altitude Up to 10,000 meters



About Us

Comtech Telecommunications Corp. is a leading global technology company providing terrestrial and wireless network solutions, next-generation 9-1-1 emergency services, satellite and space communications technologies, and cloud native solutions to commercial and government customers around the world. Our unique culture of innovation and employee empowerment unleashes a relentless passion for customer success. With multiple facilities located in technology corridors throughout the United States and the world, Comtech leverages its global presence, technology leadership and decades of experience to create the world's most innovative communications solutions.

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