

# Cambium Networks Tactical Deployable Communications (TDC)

## Overview

Cambium Networks' Tactical Deployable Communications (TDC) system is a comprehensive, rapidly deployable wireless communication solution designed for military operations, emergency response teams, border security, and remote industrial applications. Engineered to provide secure, high-bandwidth connectivity in demanding environments, the TDC integrates the PTP 700 multi-point radio with ruggedized components, ensuring mission-critical communication capabilities in field deployments.

## Key Features & Benefits

### 1. Secure and Reliable Connectivity

- Utilizes the **PTP 700 radio**, which is **FIPS 140-2 validated**, ensuring secure data transmission.
- Supports **256-bit AES encryption** to protect mission-critical information.
- Operates in licensed and unlicensed bands for flexible deployment options.

### 2. Rapid Deployment and Field Adaptability

- The system is packaged in a **custom transit case** for easy transport and deployment.
- Pre-configured components minimize setup time in tactical environments.
- Can be deployed as a stand-alone communication hub or integrated with existing infrastructure.

### 3. Rugged Design for Harsh Environments

- **IP67-rated components** protect against dust, water, and extreme weather conditions.
- The **Rugged Power Injector (RPI)** ensures stable power supply under demanding conditions.
- Shock-resistant **mounting brackets and mast assembly** enhance durability.

### 4. Extended Range and High Performance

- The **sector antenna** enhances coverage and signal strength.
- Supports **high data rates** up to **450 Mbps** over long distances.
- Ideal for use in **remote and disconnected areas** where traditional infrastructure is unavailable.

### 5. Versatile Power and Connectivity Options

- Includes a **Universal Grounded Power Adapter Kit**, supporting multiple power inputs.
- Features **tactical-grade cables** for power, RF, and data connectivity.
- **Compatible with multiple networking solutions**, allowing integration into existing communication systems.

### 6. Military-Grade Certification and Expanded Frequency Support

- The **PTP 700 radio** is **MIL-STD-810 tested**, confirming its resilience against a wide range of environmental stresses, including temperature, altitude, shock, and vibration.
- Cambium Networks offers **4.4 – 5.9 GHz and 7.1 – 8.5 GHz** versions of the PTP 700, broadening the spectrum availability and making it suitable for wide range of deployment scenarios and global use cases.

## System Components & Specifications

The TDC system includes the following components to provide a comprehensive communication solution:

Item	Part Number	Description
1	CK-TCAS020A-WW	Custom Transit Case for PTP 700, all cables, 52" - Black
2	CK-UGPWRK1B-WW	Universal Grounded Power Adapter Kit
3	CK-RHAIG02A-WW	Radio Head Assembly
4	CK-MATBRK1A-WW	Mounting Bracket Assembly
5	CC000000L085A	PTP 700 Mast - LD Pole Mount Collar (2-sided)
6	CK-RPI00G1A-WW	Rugged Power Injector Assembly
7	CK-CA0048A-WW	PTP 700 Ground Wire - 12 Gauge with Lugs attached - 4ft
8	CK-CA09US1A-WW	PTP 700 R-EPI US AC Power Cord 10'
9	CK-CA08010A-WW	PTP 700 (R-PIDU to Switch) RJF Male to RJ45 Extension Cable 10'
10	CK-CA0065A-WW	PTP 700 Ground Wire - 12 Gauge with Lugs attached - 65'
11	CK-CA01004A-WW	PTP 700 to External Ant RF Cable - Standard N Male both ends - 4ft
12	CK-15LDM18A-WW	Pole - AL2 - Mounting 18 inch
13	CK-15LDM19A-WW	Grounding Bracket
14	CK-CA16250A-WW	PTP 700 Tactical Drop Cable RJF Male to RJF Male (R-PIDU) Cable 250'
15	CK-SCTRAG1A-WW	Sector Antenna Assembly



## Emergency Response & Disaster Recovery

1. Ensures continuity of operations when traditional infrastructure is compromised.
2. Supports first responders and aid organizations in disaster-stricken areas.
3. Rapid deployment allows real-time coordination between agencies.

## Deployment Use Cases

### Military Tactical Communications

- Provides secure, high-bandwidth connectivity for deployed forces.
- Enables **real-time intelligence sharing** between command centers and field units.
- Can be used for **surveillance, reconnaissance, and coordination** in remote areas.

### Border Security & Surveillance

- Enables long-range monitoring of **critical border areas**.
- Provides **wireless backhaul for surveillance cameras and sensors**.
- Enhances **situational awareness** for security forces.

### Remote Industrial Operations

- Supports **offshore oil rigs, mining sites, and remote construction projects**.
- Ensures **high-speed data transmission** for real-time monitoring and operations.
- Reduces the need for costly wired infrastructure in remote environments.

### Temporary Network Infrastructure for Field Missions

- Ideal for **temporary or mobile field operations** requiring secure communications.
- Supports **multi-agency coordination** in dynamic operational environments.
- Can be **easily relocated and redeployed** as mission requirements change.



## Technical Specifications

1. Frequency Bands: 4.4 – 5.9 GHz
2. Data Rate: Up to 450 Mbps
3. Encryption: 256-bit AES, FIPS 140-2 certified
4. Environmental Rating: IP67 (dust & water resistant)
5. Power Input: 90-240 VAC, 50/60 Hz (with adapter options for DC input)
6. Weight: ~102 lbs (including transit case & components)
7. Deployment Time: Less than 30 minutes by a two-person team

## Why Choose Cambium Networks TDC?

- ✓ Proven Performance: Trusted by defense and security agencies worldwide.
- ✓ Cost-Effective: Reduces reliance on satellite communications and expensive infrastructure.
- ✓ Scalable & Flexible: Adaptable for various operational needs, from uni teams to large-scale deployments.
- ✓ Secure Communications: Ensures confidential and encrypted data transmission for critical missions.
- ✓ Field-Tested Durability: Built to withstand extreme conditions and rugged environments.

## Contact Information

For more details on Cambium Networks' Tactical Deployable Communications (TDC) system or to request a demonstration, please contact our Global Defense and Security Team:

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### About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

