

Containerized Tethered Elevated Mast (C-TEM)

A Shipboard Tethered Unmanned Aerial System



Rapid deployment and retrieval

360-degree coverage

Long endurance mission support

Continuous sustained operations in all-weather

Minimal integration to existing systems

Intuitive interface

Secure transmission of Radio Frequency (RF) data via RF over Fiber Optical Link (RFoFOL)

Cyber Secure/Risk Management Framework (RMF) compliant network design

Autonomous station keeping, sensor pointing, and safe recovery protocols

Capable of self-contained operations

Insusceptible to Counter Unmanned Aircraft System (UAS)

Overview

The Containerized Tethered Elevated Mast (C-TEM) extends sensor, network, and communications capabilities, meeting operational needs of the Hybrid fleet. With all-weather long endurance mission support, a user-friendly interface, and a low visual signature in-flight, C-TEM use cases are only limited by the warfighter's imagination.

Use Case Scenarios:

- Elevated communications
- Port security
- Overwatch
- Covert reconnaissance
- Long range fires
- Counter unmanned aerial systems
- Electronic warfare

C-TEM can be outfitted with numerous capability packages, ranging from radar, electronic warfare (EW), Counter UAS, ISR (Intelligence, surveillance, and reconnaissance), and more.

Specifications

Communications	High bandwidth encrypted Ethernet
Deploy/Retrieve	Less than 3min
Altitude	Up to 500 feet AGL
Payload weight budget	15lbs, with 500ft tether
Shipboard power	208 or 440 VAC 3P
Power consumption	Less than 12 kW
Battery backup	5min flight time
Speed	35+ knots
Blade circle	83"
Width & Length	42x37.5"
Rotor Diameter	29"
Overall height	26"
Flight weight	55lbs, with 15lb payload
Surface Support System	8' x 6.5' x 8' (LWH) / 7,000lbs