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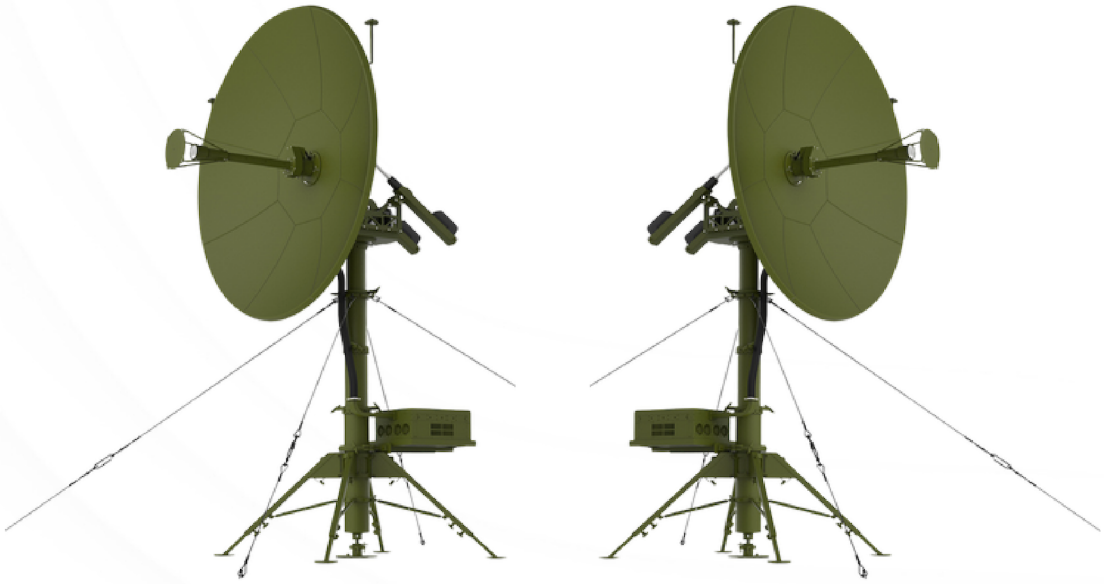
At The Forefront Of Communications Technology

# TROPOLINE240



**Fully integrated terminal**

**European-made solution**

**Rapid deployment and tooless aseembly**

The TROPOLINE 240 auto-point troposcatter terminal boasts a comprehensive **MIL-STD-810**-compliant design and is a lightweight, easy-to-use Flyaway for **C-band** communication over long distances. **Two operators can deploy it in typically 20 minutes**.
This **2.4m** fully automated motorized **troposcatter** and line-of-sight (LOS) flyaway terminal with a military-grade pneumatic mast with a quadpod base for high stability. The system comes complete with a hand pump for easy mast deployment and extension to 3m to clear obstacles and with the **RAPU** sensor kid module.

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Made by Sweden: Reliability and Innovation in Challenging Environments

## TECHNICAL DETAILS

| C- Band | |
|---|---|
| **Frequency** | 4.4 GHz to 5.0 GHz |
| **Diameter** | 2.4 meters |
| **Antenna Efficiency** | > 60% |
| **VSWR** | ≤ 1.3 : 1 |
| **RF Power handling** | 2 kW CW (Amp. not part of product) |
| **Antenna Gain** | 40 dB minimum @ 5GHz |
| **Compliance** | ITU-R F.699 radiation pattern recommendation CE 2014/30/UE |
| **Elevation Range** | -5 to +45 degrees |
| **Azimuth Range** | ±90 degrees, at full mast extension in light wind ±30 degrees, with guys and flex-WG mounted |
| **Polarization skew** | ±100 degrees, motorized |
| **Pointing Accuracy** | ±0.2 degrees (Azimuth and Elevation) |
| **Monitor/Control** | Via GUI and SNMP |
| **Input Power** | 24/48 VDC |
| **Mast Height** | 1.5 m retracted 3m extended |
| **Packing Cases** | RF and reflector: 5 robust IP65 packing cases (max. weight 70 kg/case) Mast: 5 military grade bags |

| Environmental details | |
|---|---|
| **Operational Temperature** | -20°C to +50°C |
| **Wind** | |
| **- Operational** | Up to 50 mph (80 km/h), gusting to 67 mph (108 km/h) when properly guyed down |
| **- During deployment** | 25 mph (40 km/h) with gusts up to 34 mph (54 km/h) |
| **- Survival** | 87 mph (140 km/h), guyed down and mast retracted |

| MIL STD 810G and MIL STD 461F: designed to meet compliance | | |
|---|---|---|
| **MILSTD810F Description** | **Mast and Quadpod Base** | **Antenna System** |
| **500.5: Low-pressure altitude** | Procedure I: Storage/Air Transport 57.2kPa for 1hr | Antenna: Carbon fibre composite laid up in pseudo autoclave environment EL/AZ motorisation: Designed to meet |
| **501.5: High temperature** | Procedure II: Operation. Conditions as per NATO STANAG 2895 (71°C) for three cycle | Designed to meet |
| **502.5: Low temperature** | Procedure II: Operation. -55°C for 4 hours. Severe Cold (C3) | Designed to meet |
| **503.5: Temperature shock** | Procedure I: Shock from constant extreme temperatures Fig. 503.4-1 (-40°C / +60°C) | Designed to meet |
| **505.4: Solar Radiation** | N/A | Designed to meet |
| **506.5: Rain** | Procedure II: Watertightness | Designed to meet |
| **507.4: Humidity** | 65°C 95%rh / 38°C 85%rh, 10 cycles | 100% rh |
| **508.4: Fungus Growth** | All paint and finishes designed to meet | All paint and finishes designed to meet |
| **509.4: Salt Fog** | Exposed to atomised salt solution (5% by weight in deionised water) at 35°C for 24hours, then in a climatic chamber at 23°, 50%rh for 24 hours. 48hr cycle repeated for total test duration 96 hours | Designed to meet |
| **510.4: Blowing Sand** | Procedure II: Tested at 55°C for 3 hours at 5-6%rh with Silica Sand (as per 2.3.2.5b) at 2.2 g/m3 concentration at 18m/s | Designed to meet |
| **510.5: Dust** | Procedure I: Air velocity 8.9m/s at 23°C for 6 hours, then 55°C for 6 hours | Designed to meet |
| **512.5: Immersion** | Procedure IIb Deep Fording ((2) 1.5m) : 30 minute with items packed into transit cases | Designed to meet – certified to IP65 |
| **514.5: Vibration Cat 4. Truck/Trailer/ Tracked-Restrained Cargo** | Truck Vibration: 4hrs random vibration in each axis, profile in accordance with MIL STD 810F Fig. 514.5 C1 Trailer Vibration: 500 minutes random vibration in each axis, profile in accordance with MIL STF 810F Fig. 514.5 C2 Tracked Vehicle Vibration: 500 minutes random on random vibration in each axis, profile in accordance with DEF STAN 00-35 (Part5)/3 Chapter 6-01, Fig. 8 | Designed to meet |
| **516.6: Shock: Procedure I: Functional Shock Shock: Procedure IV: Transit Drop** | Designed to meet Designed to meet | Designed to meet |
| **Wind** | Designed to meet | Designed to meet |
| **MILSTD461F Emission Susceptibility** | N/A | Designed to meet |

Requtech AB, based in Linköping, Sweden, is at the forefront of satellite communication technology. We specialize in developing high-performance, reliable satellite communication systems. Our mission is to revolutionize communication capabilities, enhancing global connectivity through innovative solutions.


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