



# FA-240 Troposcatter Antenna

COMPACT AND HIGH GAIN ANTENNA

## Features

- Available in troposcatter bands
- Based on the FA-240 satellite antenna
- Lower edge of the reflector may be raised off the ground by 6 feet
- Robust carry cases
- MIL-STD-810 compliant
- No tools required

## Overview

The FA-240 Troposcatter Antenna is a fully automated communications antenna providing the user with high capacity bandwidth in a simple to use motorised package.

The antenna is based on the ARSTRAT and MIL-STD-810 approved FA-240 satellite communications antenna.

The antenna may be assembled by two persons and is packed into flight cases for easy transport.

Troposcatter operation is provided by swapping the feedarm and feed from the standard satellite communications antenna to support the troposcatter frequencies.

The antenna may be deployed on the ground if local conditions allow or may be raised in the air to avoid any beam blockage issues.

Construction from high strength carbon fibre means the terminal is both lightweight and capable of withstanding the rigours of multiple deployments in testing environments.

The terminal may be converted to function as a satellite field swap over of the feedarms and feed to the appropriate C, X, Ku or Ka band frequency equipment.

# Technical Specification

| General      |  |
|--------------|--|
| Antenna Type | Parabolic (Segmented), centre fed  |
| Diameter     | 2.4m   |
| Polarisation | Linear Orthogonal<br>Optional Motorised Polarisation<br>Optional Circular Polarisation |
| Heading      | Fluxgate Compass or<br>Differential GPS  |

| Transmit/Receive    |  |            |
|---------------------|--|------------|
| Frequency Band      | FA-240   | 4.4-5.0GHz |
| Antenna Gain        | FA-240   | 39.0dBi    |
| Waveguide Interface | CPR187 Flanges<br>Optional Quick Release Couplings |            |

| Power             |                                       |
|-------------------|---------------------------------------|
| Power Requirement | 90 to 264V AC Power Supply<br>+24V DC |

| Environmental |   |
|---------------|---|
| Temperature   | -40 to +70°C - Transportation & Storage<br>-40 to +55°C - Operational                               |
| Humidity      | 1 to 100%   |
| Altitude      | 3,000m @ -10°C  |
| Wind Rating   | Operational 45mph (72km/h) with gusts<br>up to 70mph (112km/h)<br>Survival (stowed) 75mph (120km/h) |

| Physical        |                     |
|-----------------|---------------------|
| Weight          | Size                |
| Case 1: 145 lbs | 39.4 x 39.4 x 21.6" |
| Case 2: 141 lbs | 39.4 x 39.4 x 21.2" |
| Case 3: 145 lbs | 45.5 x 13.5 x 13.0" |
| Case 4: 88 lbs  | 55 x 19.4 x 12.1"   |
| Case 5: 139 lbs | 59.4 x 23.0 x 14.8" |
| Case 6: 130 lbs | 59.4 x 23.0 x 14.8" |
| Case 7: 78lbs   | 50.2 x 19.4 x 11.5  |

| Designed to comply to the following standards: |                                       |
|--|---------------------------------------|
| Low Temperature                                | MIL-STD-810G Method 502.6 Proc I & II |
| High Temperature                               | MIL-STD-810G Method 501.6 Proc I & II |
| Humidity                                       | MIL-STD-810G Method 507.6 Proc I      |
| Rain   | MIL-STD-810G Method 506.6 Proc I      |
| Transit Shock                                  | MIL-STD-810G Method 516.7 Proc IV     |
| Temperature Shock                              | MIL-STD-810G Method 503.6 Proc I -D   |
| Solar Radiation                                | MIL-STD-810G Method 505.6 Proc I      |
| Blowing Sand                                   | MIL-STD-810G Method 510.6 Proc II     |
| Salt Fog                                       | MIL-STD-810G Method 509.6             |
| Vibration                                      | MIL-STD-810G Method 514.7 Proc I      |
| Altitude                                       | MIL-STD-810G Method 500.6 Proc I & II |



Ultra reserves the right to vary these specifications without notice.

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