

# Type 100: 1.0m Antenna System



- ISO 9001:2008 Certificate of Registration
- Factory pre-assembled Az/EI mount.
- One-piece thermoset-molded reflector.
- Single bolt fine elevation adjustment.
- Available with a wide variety of Ku-band feeds.
- Galvanized 19 mm (.75") O.D. feed support legs.
- Plated hardware for maximum corrosion resistance.
- All materials comply with EU Directive No. 2011/65/EC (RoHS).



The **Skyware Global 1.0m Type 100 Offset Antenna** is a rugged commercial grade product suitable for the most demanding applications.

- The reflector is thermoset-molded for strength and surface accuracy. Molded into the rear of the reflector is a network of support ribs which strengthens the antenna and helps to sustain the necessary parabolic shape.
- The Az/EI mount is constructed from heavy-gauge steel to provide a rigid support to the reflector.
- The Az/EI mount secures the antenna to either a 60mm (2.38") or 73-76mm (2.88"-3.00") O.D. mast and prevents slippage in high winds.
- A specially formulated powder paint process offers excellent protection from weather-related corrosion.



Satcom solutions for the long haul

REV 03/17-02  
Page 1 of 2

1315 Outlet Center Drive, Smithfield, NC 27577 T + 1 919 934 9711 F + 1 919 989 2274 Sales @ Skyware Global.com

All designs, specification and availabilities of products and services presented in this bulletin are subject to change without notice. ©2016 Skyware Global

**• PRODUCT SPECIFICATIONS**

**RF Performance**

Effective Aperture . . . . . 1.0m (40 in)

**Operating Frequency**

TX. . . . . 13.75 - 14.50GHz  
 RX. . . . . 10.70 - 12.75GHz

Polarization. . . . . Linear, Orthogonal

**Gain (±0.2 dB)**

TX. . . . . 41.7 dBi  
 RX. . . . . 40.2 dBi

**3 dB Beamwidth**

TX . . . . . 1.2°  
 RX . . . . . 1.7°

**Sidelobe Envelope (Tx, Co-Pol dBi)**

1.5° < θ < 20° . . . . . 29-25 log θ dB  
 20° < θ < 26.3° . . . . . -3.5 dB  
 26.3° < θ < 48° . . . . . 32-25 log θ dB  
 48° < θ < 180° . . . . . -10 dB

**Antenna Cross-Polarization**

. . . . . 30 db in 1 dB Contour

**Antenna Noise Temperature**

10° EL. . . . . 58 K  
 20° EL. . . . . 48 K  
 30° EL. . . . . 37 K

**VSWR**

TX. . . . . 1.3:1  
 RX. . . . . 1.5:1

**Isolation (Port to Port)**

TX . . . . . 80db  
 RX. . . . . 35db

**Feed Interface**

TX . . . . . WR75 Flat Flange  
 RX. . . . . WR75 Flat Flange

(All specifications typical)

**1.0 m Ku-Band Offset Antenna**

**Mechanical Performance**

Reflector Material. . . . . Glass Fiber Reinforced Polyester

Antenna Optics . . . . . One-Piece Offset Feed Prime Focus

Mount Type . . . . . Elevation over Azimuth

Elevation Adjustment Range. . . . . 7°-84° Continuous  
 Fine Adjustment

Azimuth Adjustment Range . . . . . 360° Continuous  
 ±20° Fine Adjustment

Mast Pipe Interface. . . . . 60mm or 73-76mm  
 (2.38 in or 2.88-3.00 in) Diameter

**Environmental Performance**

**Wind Loading**

Operational. . . . . 45 mph (73 km/h)

Functional Survival . . . . . 80 mph (128 km/h)

Ultimate Survival . . . . . 125 mph (200 km/h)

Operational Temperature. . . . . -40°C to +60°C

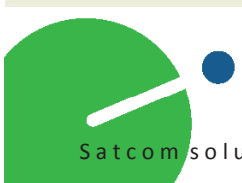
Survival Temperature . . . . . -50°C to +80°C

Humidity. . . . . 0 to 100% (Condensing)

Atmosphere. . . . . Standard Hardware 720 Hrs  
 SST Requirements (ASTM B-117)

Solar Radiation . . . . . 360 BTU/h/ft<sup>2</sup>

Shock and Vibration. . . . . As Encountered during  
 Shipping and handling



Satcom solutions for the long haul



REV 03/17-02  
 Page 2 of 2