

# 1200



## TECHNICAL SPECIFICATIONS



### Electrical

|                                 |                                    |                          |
|---------------------------------|------------------------------------|--------------------------|
| Tx & Rx cables                  | 2 RG6 cables (10 m each)           |                          |
| Control Cables                  |                                    |                          |
| Standard                        | 10m Ext. Cable with MIL Connectors |                          |
| Optional                        | upto 75m available                 |                          |
| Transmit (Tx) Power             | 1 to 200 Watt (Ku band)            |                          |
| Transmit (Tx) Frequency         | 13.75 – 14.50 GHz (Ku Band)        |                          |
| Receive (Rx) Frequency          | 10.95 – 12.75 GHz (Ku Band)        |                          |
| Midband Gain                    |                                    |                          |
| Rx                              | 41.5 dBi                           |                          |
| Tx                              | 43.0 dBi                           |                          |
| Antenna Noise Temperature       |                                    |                          |
| 20° Elevation                   | 46° K                              |                          |
| 30° Elevation                   | 43° K                              |                          |
| Sidelobe Envelope, Co-Pol (dBi) | Receive                            | Transmit                 |
|                                 | 1° < $\theta$ < 20°                | 29 - 25 Log $\theta$ dBi |
|                                 | 20° < $\theta$ < 26.3°             | - 3.5 dBi                |
|                                 | 26.3° < $\theta$ < 48°             | 32 - 25 Log $\theta$ dBi |
|                                 | 48° < $\theta$                     | - 10 dBi (averaged)      |
| Cross-Polarization              |                                    |                          |
| Within 1 dB contour             | -30 dB Max. <sup>(2)</sup>         |                          |
| Any Angle off Axis              | -25 dB Max.                        |                          |
| VSWR                            | 1.3:1 Max.                         |                          |

### Mechanical

|                    |   |
|--------------------|---|
| Reflector          | 1.2 m Prime Focus, Offset Feed <sup>(1)</sup>             |
| Mount Geometry     | Elevation over Azimuth                                    |
| Deployment Sensors | GPS antenna<br>Compass $\pm$ 2°<br>Tilt sensor $\pm$ 0.2° |

### Physical

|                           |   |
|---------------------------|---|
| Mounting Plate            | L: 52" (1321mm) W: 22" (559mm)                            |
| Stowed Dish Ext. Dims     | L: 69.75" (1771mm) W: 48.6" (1235mm)<br>H: 19.25" (488mm) |
| Deployed Height           | 66" (1676 mm) Max.  |
| Reflector Weight          | 35 lbs (15.9 kg)  |
| Total Weight w/ Reflector | 204 lbs (92.5 kg)   |

### Environmental Survival

|               |                                |
|---------------|--------------------------------|
| Wind Deployed | 70 mph (112 km/h)              |
| Wind Stowed   | 140 mph (225 km/h)             |
| Temperature   | -40°F to 150°F (-40°C to 65°C) |

### Operational

|             |                                |
|-------------|--------------------------------|
| Wind        | 45 mph (72 km/h)               |
| Temperature | -26°F to 130°F (-32°C to 55°C) |

### RF Interface

|                 |   |
|-----------------|---|
| Radio Mounting  | Feed Arm / Rear of Base /<br>Inside Vehicle |
| Axis Transition | Twist-Flex Waveguide                        |
| Waveguide       | WR75 Cover Flange Interface                 |
| Coaxial         | RG6U from Feed Arm to Base                  |
| Feed            | 2 port Xpol                                 |

### Motors

|                      |                 |
|----------------------|-----------------|
| Electrical Interface | 12V DC 15A max. |
|----------------------|-----------------|

### Maximum Mount Rotation

|                        |                                       |
|------------------------|---------------------------------------|
| Azimuth                | Full 360° in overlapping 200° sectors |
| Elevation              | 0 - 85°                               |
| Polarization           | $\pm$ 90°                             |
| Elevation Deploy Speed | Variable 2°/sec typ                   |
| Azimuth Deploy Speed   | Variable 15°/sec max,<br>10°/sec typ  |
| Peaking Speed          | 0.2°/sec                              |

### Warranty

|          |         |
|----------|---------|
| Standard | 2 years |
|----------|---------|

**Note:** <sup>(1)</sup> Antenna based on Prodelin, Model 1132 / 1134.

<sup>(2)</sup> Depending on size and weight for feed arm mounting limitation



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Specifications are subject to change

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