



3.7 Meter Trifold® Transportable

The ASC Signal modular 3.7 meter Trifold® transportable design enables one person deployment in less than 30 minutes. A large range of adjustment provides non-critical positioner/trailer orientation and the ability to view geostationary satellites, horizon-to-horizon, from any location worldwide. The antennas' aluminum trifold reflector panels are cut from a single-piece precision spinning. Panel design and manufacture provide excellent thermal expansion characteristics and ensures the accurate surface contour.

Unique subreflector and strut storage: Collapsible struts and storage for subreflector under the reflector. All Trifold® antennas meet or exceed Asiasat, Eutelsat, Panamsat, and INTELSAT® F-1 and E-2 requirements.

In addition, they meet or exceed ITU-R S.580 and S.465 recommendations for pattern performance for 2° satellite spacing.

- Asiasat, Eutelsat, Panamsat and INTELSAT® requirements
- U.S. FCC regulation 25-209 for mandatory pattern requirements for 2° satellite spacing. Based on off-satellite measurements at Ku-Band
- ITU-R S.580 and S.465 recommendations for pattern performance for 2° spacing
- Russian Homologation Certificate #OC/1-AO-136



SPECIFICATIONS

3.7 Meter Trifold® Transportable

Electrical Performance

| | C-band 2-Port Circular Pol Feed | | C-band 2-Port Linear Pol Feed | | Ku-band 2-Port Linear Pol Feed | | X-band 2-Port Circular Pol Feed | |
|--|------------------------------------|-------------------|----------------------------------|-----------------|-----------------------------------|-------------------|------------------------------------|-----------------|
| | Receive | Transmit | Receive | Transmit | Receive | Transmit | Receive | Transmit |
| Frequency (GHz) | 3.625- 4.200 | 5.850- 6.425 | 3.625- 4.200 | 5.850- 6.425 | 10.700- 13.250 | 13.750- 14.800 | 7.250- 7.750 | 7.900- 8.400 |
| Insertion Loss dB | 0.50 | 0.20 | 0.15 | 0.20 | 0.15 | 0.20 | 0.15 | 0.15 |
| Gain @ Feed Output Flange (dBi ± 0.2 dB) | | | | | | | | |
| | 3.625 GHz | 40.50 | 40.50 | | | | | |
| | 7.250 GHz | | | | | | 47.40 | |
| | 7.900 GHz | | | | | | 48.00 | |
| | 10.700 GHz | | | | 50.50 | | | |
| | 13.750 GHz | | | | 52.20 | | | |
| Antenna Noise Temperature | | | | | | | | |
| 10° Elevation | 36 K | | 36 K | | 39 K | | 39 K | |
| 30° Elevation | 23 K | | 23 K | | 26 K | | 27 K | |
| 50° Elevation | 21 K | | 21 K | | 24 K | | 24 K | |
| Port-to-Port Isolation | | | | | | | | |
| Rx to Rx | 85 dB | | 85 dB | | 40 dB | | 25 dB | |
| Tx to Rx | 40 dB | | 85 dB | | 40 dB | | 25 dB | |
| Waveguide Interface Flange | Brass CPR-229G | Brass CPR-137G | Brass WR229 | Brass WR137 | Brass WR75 | Brass WR75 | Aluminum WR112 | |
| Tx Power Capacity | 500 W | | 5000 W | | 2000 W | | 750 W | |
| Maximum Pressurization | 0.50 psi | | 0.50 psi | | 0.50 psi | | 0.50 psi | |

Mechanical Performance

| | |
|--------------------------|---------------------------|
| Optics Type | Dual Reflector Gregorian |
| Reflector Material | Precision Formed Aluminum |
| Reflector Segments | 3 |

Environmental Performance

| | |
|-------------------------------|--|
| Operational Temperature | -40°C to 50°C (-540°F to 125°F) |
| Wind Loading | Survival 200 km/h (125 mph) (with or without Motor Drives) |
| | Operational ... 72 km/h (45 mph) with Gusts to 105 km/h (65 mph) (with or without Motor Drives) |
| Rain | 102 mm (4 in per hour) |
| Solar Radiation | 360 BTU/hr/ft ² (1135 W/m ²) |
| Relative Humidity | 100% |
| Shock and Vibration | As Encountered by Commercial Air, Rail and Truck |
| Atmospheric Conditions | As Encountered by Moderately Corrosive Coastal and Industrial Areas |



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