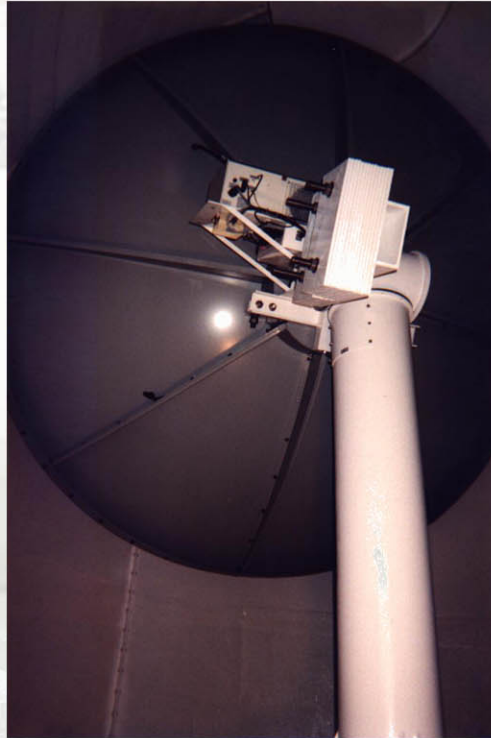
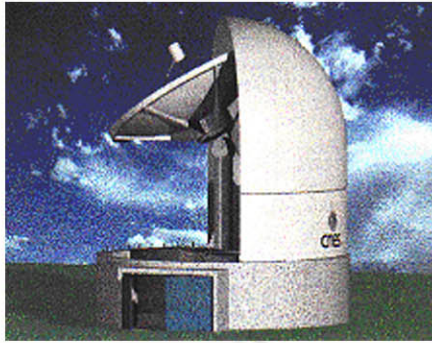


3.1 m TM/TC SATCOM EARTH STATION

& ANTENNA CONTROL UNIT

ARES Series



DESCRIPTION

This station is designed for signals transmission and reception in the standard SATCOM antenna frequency band (others bands are available on request).

It is used for Low Earth Orbit Phase (LEOP) satellite Telemetry & Control.

It is operated in remote ephemeris mode.

The EIRP can be customized according to the user's need.

This station is protected by a radome for easy maintenance and high reliability.

The station is mainly composed of the following parts:

- Two axis antenna with feed
- Control & servo power rack
- Antenna Control Unit
- Radome

ARES 3.1 m

SPECIFICATIONS

TRANSMIT

- Frequency.....2025—2110 MHz
- EIRP.....50 dBW (with 100 W HPA)
- Polarization.....RHCP or LHCP
- Axial Ratio.....< 3 dB

RECEIVE

- Frequency.....2200—2300 MHz
- G/T (0 to 40°C).....> 10 dB / K @ 10°
Elevation angle
- Polarization.....RHCP or LHCP
- Axial Ratio.....< 3 dB
- TC / TM ratio.....240/221

RADOME

- Type.....Sandwich
- Diameter4.04 m
- Fixing.....by 48 M18 bolts on
a 3.8 m diameter circle
- Weight.....350 Kg

ELECTRICAL

- Power supply: through Control & Servo Power Rack
- Pedestal peak consumption: 220 VAC, 50 Hz, 0.6 kVA

PEDESTAL

- Type.....Elevation over Azimuth
- Elevation range.....5° to +185°
- Azimuth range.....+/- 265° or continuous in option
- Rotation speed max.....≥ 20°/s on both axes
- Acceleration max.....≥ 20°/s² on both axes
- Pointing accuracy.....± 0.08° (in manual mode)
- Optical encoders.....12 bits (13, 14 bits in option)

ENVIRONMENTAL

- Storage temperature.....-30° to +40°C
- Operating temperature.....-30 to +40°C (outdoor)
0 to + 40°C (inside the radome)
- Rain.....up to 50 mm/hour
- Relative humidity.....0 to 100% (outdoor)
- Operating wind load.....180 Km/h

MECHANICAL

- Antenna dimensions.....3.1 m
- Total weight (pedestal
and dish with feed).....< 510 kg
- Color (antenna and
pedestal).....RAL9003 (white) or other
upon request.