UHF Parabolic Grid Antenna CRC90-17

Creative Design Corp.

☆ Circular Polarization on 1.7GHz Band Applicable for Weather Satellites.
☆ A Light Weight & Low Wind Load Design Makes It Possible High Portability & Installability
Antenna Diameter: 0.9m
☆ Offering a High Gain & Ideal Pattern with Unwanted Radiation Pattern

GENERAL

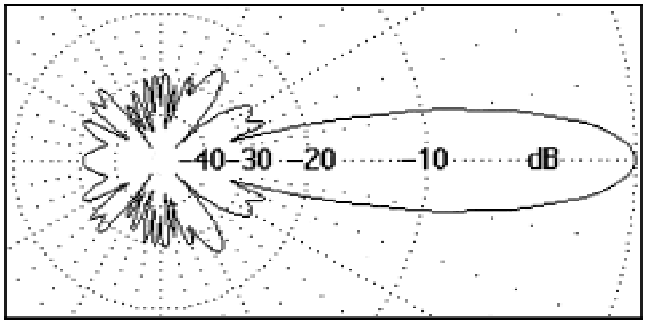
This CRC90-17 is a high gain, grid parabolic antenna applicably designed for a weather satellite communication offering circular polarization characteristic on 1.7GHz band.
With use of an ideally designed reflector which structures out in the circular alignment by use of a multiple bars, makes this antenna contribute to be a light weightability and low-wind-loadability.
In the meanwhile, a helical antenna is used for the radiation unit which determines the electrical performance of this type of antenna, makes it possible to offer a sufficient circular radiation pattern with offering an ideal half-beamwidth, that consequently enables to obtain a maximum valid gross area and transmit a clean radiation characteristic with less leak radiation.

The reflector has two main cross bars which consists of eight pieces of square tubes and flats bar aligned and spreaded out effectively instead of applying a cross-shaped structure using outer frame, that results to become this antenna high strength and durability. Being of smartness in its finishing, it helps to minimize the wind surface area for less wind loading. The structural materials are mainly high tension aluminum and anodized aluminum. Two types are available either the different assembling type of the reflector, one is factory assembled type while other is fabrication type needing assembly at a site.

Polarization:

Default polarization is right-turn circling, but left-turn circling is also available upon request.

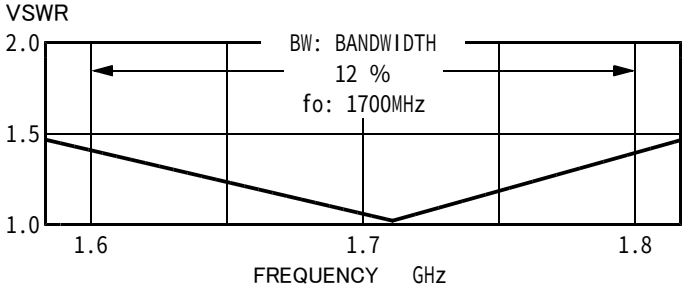
CRC90-17



1.7GHz Radiation Pattern

SPECIFICATION

Model, Diameter	CRC90-17 ϕ0.9m
Frequency	1.6〜1.8 GHz
Forward Gain	21 dBi
F/B Ratio	30 dB
Half Beam Width	12°
VSWR	Less than 1.4:1
Input Connector	Type -NJ-
Elevation Angle	±9° 3° Pitch
Wind Loading, 45m/s	1200N (124kg)
Wind Speed	60 m/s
Mast Diameter	60〜77 mm
Weight	8.5 kg



VSWR Characteristic