

Ellipse DR II

Central Receive Antenna



Applications

- Electronic News Gathering
- Mobile Video Transmission

Features

- New Digital Optical encoders eliminate conventional potentiometers
- Dual axis pan and tilt control
- Compact integrated radome
- Continuous rotation option
- Single, dual, or triband options
- Quad polarization (H, V, LCP, RCP)
- RFI and DC Surge Protection
- Advanced solid-state switching
- 2 GHz model includes high dynamic range low noise amplifier (LNA)
- 2 GHz Gain reduction 24/14 dB select
- Latest design 2 GHz PCS / MMDS reject filter
- 7 & 13 GHz models include block downconverter to 2 GHz.
- 7 GHz digital ready, standard

Overview

The MRC Ellipse DR II Antenna uses an offset, fed parabolic antenna that has been designed for broadcast receive applications. It covers the standard 2, 7, and 13 GHz broadcast microwave bands. The antenna system includes advanced solid-state polarization and band switching, thereby eliminating less reliable electro-mechanical switches.

The MRC Ellipse DR II system provides both elevation and azimuth direction control, which provides the user with a high degree of pointing accuracy in order to achieve optimum system performance. The system is available in either a single, dual, or triband configuration. The 2 GHz version includes a very sharp PCS/MMDS reject filter, as well as a high-level, low-noise amplifier which provides additional PCS overload protection over a wide dynamic range. The 7 GHz version includes a 7 GHz to 2 GHz downconverter, and the 13 GHz version includes a 13 GHz to 2 GHz down-converter.

For complete environmental protection a two-piece, lightweight fiberglass radome has been included in the design. The two-piece radome design allows for simplified and reduced installation costs.

SPECIFICATIONS

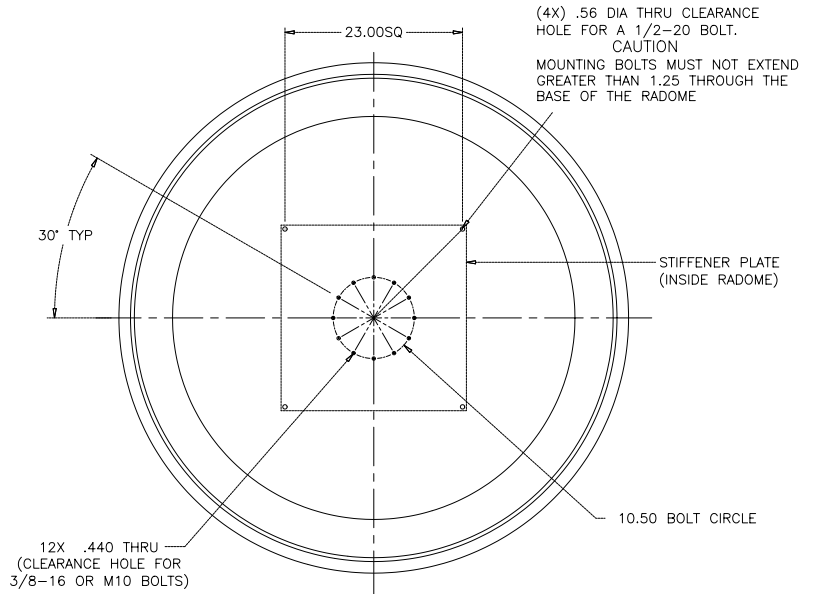
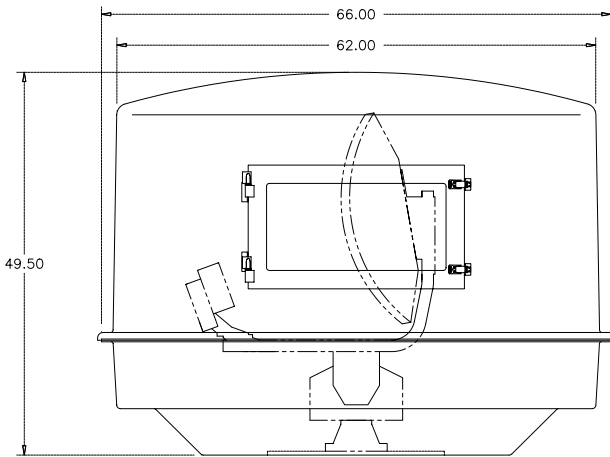
WINDLOAD

Frontal Windload 90 MPH: 366 lbs.
 Frontal Windload 125 MPH: 706 lbs.

ENVIRONMENTAL

Temperature Range: -30° to + 60° C

Model	2 GHz	6.5 – 7 GHz	13 GHz	14 / 15 GHz
Frequency, GHz	1.99 to 2.5	6.4 to 7.1	12.7 to 13.2	14.7 to 15.25
Gain, dBi (nominal)	23	34	36	38
Azimuth, degrees	9	2.5	1.5	1.4
Elevation degrees	16	5	3.0	2.8
LNA Noise Figure, dB	<1.5	<3.0	<4.0	<4.0
LNA Gain, dB	24/114	24	24	24
Polarization	Quad	Quad	Quad	Quad
Switching	Solid - State	Solid – State	Solid – State	Solid – State
Azimuth Rotation	Continuos/ Non-CRO	Continuos/ Non-CRO	Continuos/ Non-CRO	Continuos/ Non-CRO
Elevation Tilt Range	+25 to -15	+25 to -15	+25 to -15	+25 to -15
Weight, lbs. (approx.)	150 lbs.	150 lbs.	150 lbs.	150 lbs.



Note: Dimensions in inches



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