



V7C-FRO-440

Vpol, 40° H-Beam

698-896 MHz

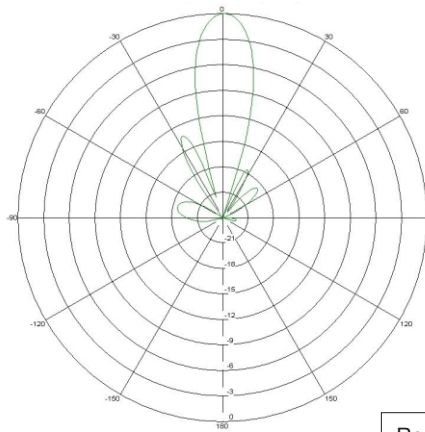
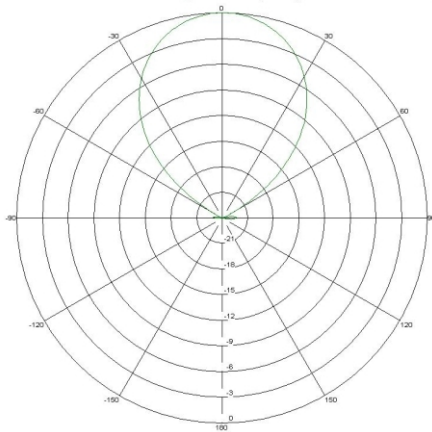
[Link to Mechanical Drawing](#) →

Electrical Specifications

Frequency	698-896 MHz
Polarization	Vertical
Gain @ 698 MHz	16.4 dBi
Gain @ 782 MHz	16.9 dBi
Gain @ 896 MHz	17.4 dBi
Horizontal Beam (3dB Points)	40°
Vertical Beam (3dB Points)	14.5°
Elect. Downtilt Range, 2° Increments	0-10°
VSWR (0° ET) / Return Loss	<1.45:1 / 14.7 dB
VSWR (2, 4 & 6° ET)	<1.40:1 / 15.6 dB
VSWR / Return Loss w/tp	<1.50:1 / 14.0 dB
Front-to-Back at Horizon	>30 dB
Upper Side Lobe Suppression	<-18 dB
Impedance	50 Ohms
Power Input Per Connector	500 CW at 800 MHz
Intermodulation (2x20W)	<-150 dBc

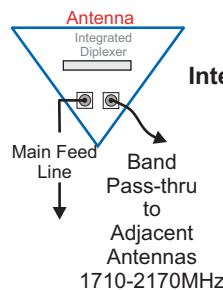
Mechanical Specifications

Input Connector (female)	Back 7/16 DIN or w/bot. opt.
Antenna Dimensions (LxWxD)	50.5 x 18.8 x 6.2 in. (1282 x 478 x 157mm)
*Antenna Weight	29.0 lbs
Bracket Weight	13.2 lbs
RF Distribution	Printed Microstrip Substrate
Radome	Ultra High-Strength Luran
Weatherability	UV Stabilized, ASTM D1925
Radome Water Absorption	ASTM D570, 0.45%
Environmental	MIL-STD-810E
Wind Survival	150 mph
Front Wind Load @100mph	156 lbf
Equivalent Flat Plate @100mph	3.18 sq-ft. (c=2)
Mounting Brackets	Fits 3.5 Inch Max. O.D. Pipe
Mechanical Downtilt Range	0-12°
Clamps/Bolts	Galvanized Steel/Stainless Steel



Recommended Connector Coupling Torque
7/16 DIN: 220-265 lbf-in (25-30 N-m)

**Available with
Integrated Pass-Thru Diplexers
to reduce mainline cables
and eliminate separate
external devices**



Integrated Pass-Thru Diplexers will work with TMA's

Return Loss at pass-thru port
into 50Ω load ≥17.7 dB

1710-2170MHz

Ordering Information & Options

- V7C-FRO-440-x "-x" is a placeholder for the built-in fixed electrical downtilt in degrees, set to 0, 2, 4, 6, 8 or 10
- V7C-FRO-440-xip "ip" option includes pass-thru integrated diplexer(s) which pass DC to the diplexer port(s)
- V7C-FRO-440-xip-bot for bottom mounted connectors, add "-bot" (otherwise antenna comes standard with back mounted connectors)

*Antenna Weight may vary slightly with options.