



**661 Series**

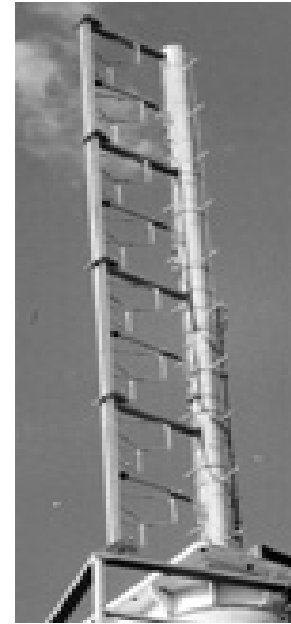
174-230MHz TV Quadrant Antenna

**PRODUCT DESCRIPTION**

Quadrant antennas provide a cost-effective top or side mount TV antenna for omnidirectional coverage in Band III. Quadrant antennas are ideal for low and medium power single channel Band III TV applications. Coverage is basically omnidirectional and may be altered somewhat by adjustment of the positions of the radiators on the RFS antenna test range. Each bay comprises two radiating elements to give approximately 3.5dBd gain. Up to six bays are available to meet higher gain needs. The antenna system may be operated with pressurized or unpressurized feeders.

**FEATURES / BENEFITS**

- Designed for high corrosion resistance and long life in harsh environments
- Includes top-mounted hot-dip galvanized support pole
- All solid outer, jacketed cables for high reliability
- Stainless steel radiators
- Omnidirectional coverage
- Horizontal polarization
- Available in low power (unpressurized) and medium power (pressurized) versions



661 Series showing 661-4 Antenna

**TECHNICAL FEATURES**

**DETAILS**

<b>Product Type</b>		Band III (High VHF) 661 TV Antenna
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**ELECTRICAL SPECIFICATIONS**

<b>Antenna Type</b>		Turnstile Antenna
<b>Operating Frequency Range</b>	MHz	174-230
<b>Polarization</b>		Horizontal
<b>Azimuth Radiation Pattern</b>		Omnioid
<b>Impedance</b>	Ohms	50

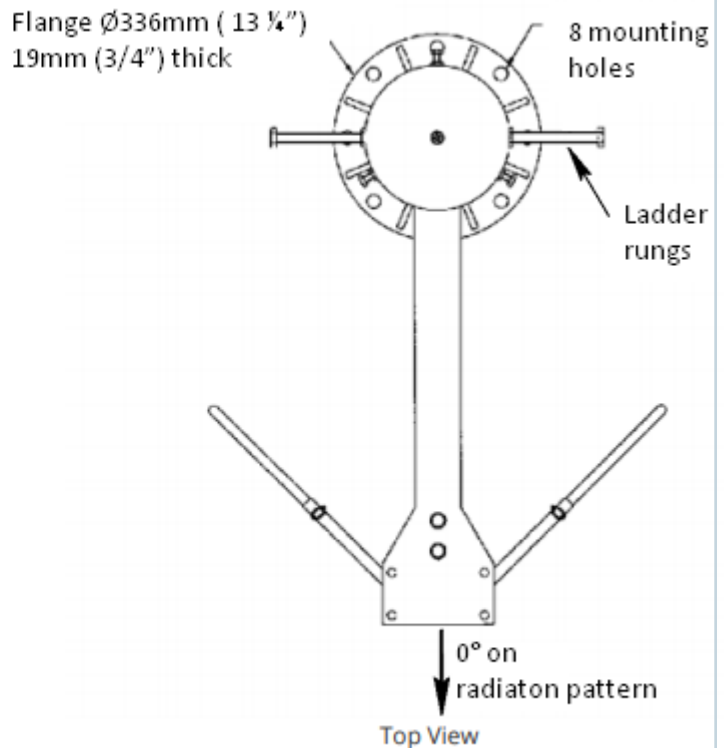
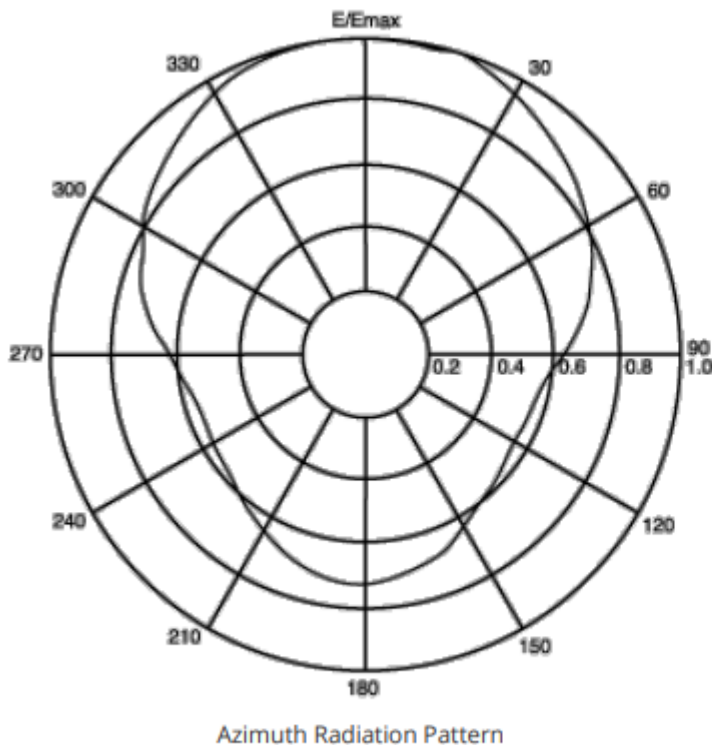
**MECHANICAL SPECIFICATIONS**

<b>Pressurization Operational</b>	kPa (psi)	10 to 25 (1.4-3.6)
<b>Pressurization Test</b>	kPa (psi)	100 (15)



**MODEL NUMBER SPECIFICATIONS**

Antenna Model		661-1	661-2	661-4	661-6
Number of Bays		1	2	4	6
Nominal Gain (Mid-band)	dBd	3.5	6.5	9.5	11
Return Loss	dB	26 Vision, 23 across channel			
Power Rating	kW	0.25/ bay unpressurized 2.5/ bay pressurized			
Number of Channels		Single			
Input Connector		7/8" EIA Flange			
Base Diameter	mm (in)	336 (13.2)			
Mounting (Standard)	mm (in)	8 x 20mm (8 x 3/4") bolts on 297mm (11.75") PCD			
Mounting Type		Side or Top			
Effective Area Front (Full Antenna) No Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.871 (9.40)	1.530 (16.50)	2.848 (30.60)	4.166 (44.80)
Effective Area Side (Full Antenna) No Ice	m <sup>2</sup> (ft <sup>2</sup> )	0.823 (8.90)	1.447 (15.60)	2.693 (29.00)	3.939 (42.40)
Base Moment	kN-m (lb-ft)	1.786 (1317)	5.510 (4064)	19.09 (14080)	40.84 (30122)
Base Shear	kN (lb)	1.854 (417)	3.256 (732)	6.06 (1362)	8.864 (1993)
Design Wind Speed (max)	kmh (mph)	240 (150)			
Weight	kg (lb)	90 (198)	190 (419)	275 (606.27)	675 (1488)



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