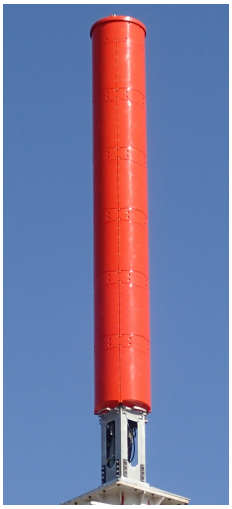
PRODUCT DATASHEET

PEPL Panel Array Series

470-700MHz TV Panel Arrays

PEPL (PEP-Lite) Series

The PEP-Lite broadband low wind load antenna has dual inputs and is capable of horizontal, vertical, circular or elliptical polarisation. The PEP-Lite broadband array is ideally suited to the broadcaster who requires maximum flexibility now and into the future. These antennas are also suited to MIMO and MISO operation. Ideal for use by a single broadcaster, or multiple broadcasters as a shared antenna, PEP-Lite antennas use RFS patented VPT technology. Different broadcasters sharing the same antenna can have station specific polarisation ratios which can be changed post-installation by varying the output phase of the combiner.



Typical PEPL Module on Test Range

FEATURES / BENEFITS

- Fully engineered for Digital TV, Mobile TV, MIMO and MISO applications
- Corrosion resistant construction with cylindrical fibreglass radome
- Single/independent inputs allowing utmost polarisation flexibility
- Horizontal / Vertical, Circular or elliptical polarization
- Extremely low wind loading
- Standard and hurricane rated options
- High power rating
- Array design allows a variety of horizontal radiation patterns. Option available to modify vertical radiation pattern characteristics in the field when specified at time or order

Technical features

STRUCTURE		
Product Line		Antenna UHF TV
Product Type		Band IV/V (UHF) TV Panel Arrays
ELECTRICAL SPECIFICATIONS		
Frequency Range	MHz	470 - 700
Polarization		Horizontal Vertical Circular Elliptical
VSWR		< 1.1:1
Power Rating	kW	60kW per input 80kW per input 120kW per input
MECHANICAL SPECIFICATIONS		
Number of Channels		Multi-channel
Input Connector		Dual 6-1/8" EIA Dual 7-3/16" Single 8-3/16"
Dimensions (Height or Length)	cm (in)	Refer external document
Dimensions (Width)	cm (in)	Refer external document
Pressurization Operational	kPa (psi)	10-25 (1.4-3.6)
Pressurization Test	kPa (psi)	100 (15)
MATERIAL		
Colour		Red / White radome standard, other upon request

External Document Links

PEP-Lite Application Guide

Notes

Note 1: CaAa is calculated based on supercritical flow to ANSI/TIA-222-G. Contact a qualified structural consultant to confirm this applies to your installation.

Note 2: An effective area of 0.5 m^2 (5.4 ft^2) to account for lightning rod, lifting jib, etc. at top of the antenna is included.

Estimated CaAa of climbing rung is 0.1m2/m height (1.0 ft2/ft height) and is not included in the calculation. Interface steelwork to tower and power divider network is not included in effective area calculations.
Note 3: Gain at 666 MHz, omni-directional configuration, first null filled to 20%.
Note 4: HPol and VPol gains shown.

Additional technical details including gain information and patterns appear in the Application Guide. See external document link