PRODUCT DATASHEET

607L

47-88MHz TV Panel Arrays

607L Series

607L

The 607L series of panels have a low wind load and are engineered to provide customized coverage for any single TV channel in Band I, similar to the 606L panel.
Where the 606L is used in four-sided array design, the 607L has a broader beamwidth for arrays mounted to triangular towers.
The 607L panel comprises two separate dipole and screen assemblies vertically spaced one-half wavelength apart. Each assembly has one half-wave dipole mounted on a screen with a 7/8" EIA input and must be mounted in pairs. Both the dipole and screen are made from galvanized steel tube for maximum strength and minimum wind load.
The open construction of these panels permits easy inspection and maintenance after installation.
The 607L antenna can be arranged in an array to provide the required coverage for a particular service area.
Array design is carried out by RFS engineers to provide directional or omni-directional patterns as well as beam tilt and null fill tailored to the customer's specification.
Panels are fed through a power divider network, normally fully pressurized, and designed to meet the power handling requirements at the customer's specified site. Half panels rated at 5kW achieve high power ratings in an array.
To minimize shipping costs panels are supplied in "knockdown" form with dipoles, screens, power dividers and interconnecting cables in separate packages. Full assembly details are provided.

FEATURES / BENEFITS

- Low wind load
- Pressurizable to dipole feed points
- Feed system radomes available for snow and ice conditions
- Temperature range -40 to +60 degrees C available
- Supplied in kit form for easy transport
- Three-sided array design
- Rugged galvanized steel construction
- Horizontal polarization
- Array design by RFS engineers provides directional or omni-directional patterns as well as beam tilt and null fill tailored to individual customer requirements. Contact RFS for details.

Technical features

STRUCTURE

Product Line		Antenna TV
Product Type		Band I (Low VHF) TV Panel Array 607L

ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	47 - 88
Polarization		Horizontal
Nominal Gain (Mid-band)	dBd	7
Half Power Beamwidth Azimuth	degrees	77
Return Loss	dB	23 Vision, 20 across channel
Impedance (unbalanced)	Ω	50

PRODUCT DATASHEET

607L

47-88MHz TV Panel Arrays

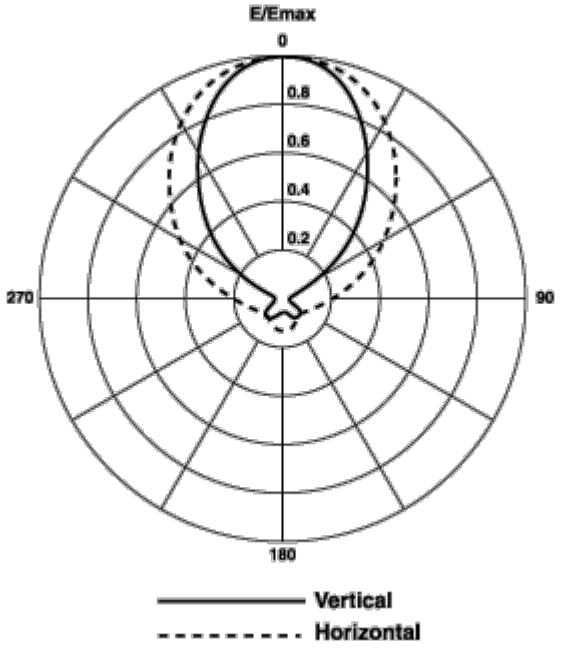
607L Series

MECHANICAL SPECIFICATIONS

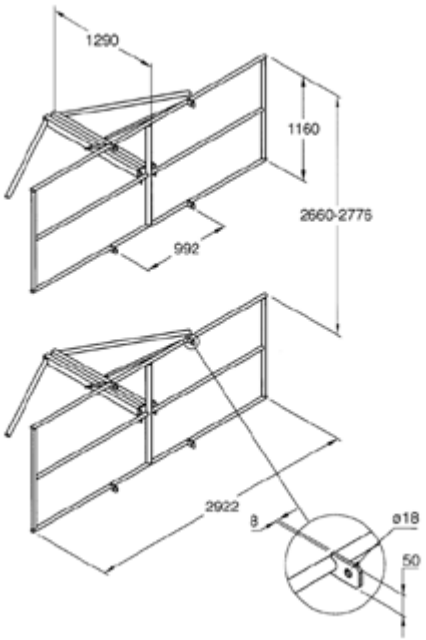
Number of Channels		Single
Input Connector		2 x 7/8" EIA Flange / Panel
Mounting (Standard)	mm (in)	8 x 16mm (8 x 5/8") bolts
Recommended Spacing between Bays	cm (in)	273 (107)
Effective Area Front (full antenna) No Ice	m^2 (ft^2)	1.28 (13.77)
Effective Area Side (full antenna) No Ice	m^2 (ft^2)	1.08 (11.62)
Design Wind Speed (max)	km/h (mph)	240 (150)
Pressurization Operational	kPa (psi)	10 - 25 (1.5 - 3.6)
Pressurization Test	kPa (psi)	100 (15)
Weight	kg (lb)	120 (265) Note 1

MATERIAL

Material - Insulators		PTFE
Material - Radiators		Hot Dipped Galvanised steel
Material - Reflecting Screen		Hot Dipped Galvanised steel



Radiation Pattern



607L Dimensions

External Document Links

Notes

Note 1 Dimensions and weights are for Ch E3 (54 to 61 MHz). These figures will vary with the selected channel.