



SBB Series

Band IV/V (UHF) Antenna 470-700 MHz

The SBB series of antennas are broadband low wind load antennas designed as interim, permanent reserve or main antenna. The SBB is ideally suited to the broadcaster who requires a high performance antenna with frequency agility to allow for both current and future channel operation. Used by a single broadcaster, or multiple broadcasters as a shared antenna, SBB antennas provide unprecedented broadband performance. SBB antennas are available 8, 16, 24 and 32 slots high and with Cardioid 'C170' or Skull 'S180' patterns. See external document attached.



SBB Series - 8 bay shown

FEATURES / BENEFITS

- Full broadband performance 470-700 MHz for future and current channel allocations.
- Corrosion resistant construction with cylindrical fibreglass radome.
- Extremely low wind loading.
- High power rating.
- Supplied with brackets for side mounting.
- For detailed technical and mechanical information click the external document link on Sheet 2.

Technical features

STRUCTURE

Product Line		Antenna TV
Product Type		Band IV/V (UHF) TV Slot Antennas

ELECTRICAL SPECIFICATIONS

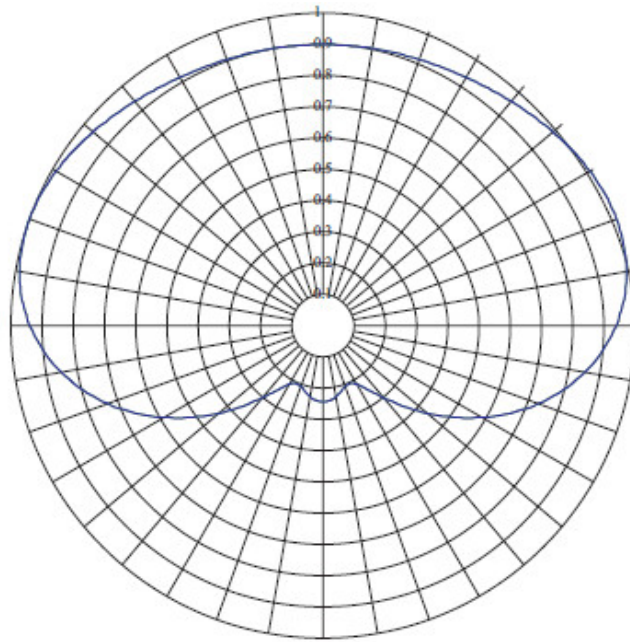
Frequency Range	MHz	470 - 700
Polarization		Horizontal
Nominal Gain (Mid-band)	dBd	Note 4
VSWR		< 1.15:1 (1.1 on channel)
Power Rating	kW	20kW, 40kW, 60kW, 65kW
Power Rating per Input	kW	20 (3-1/8 EIA) 40 (6-1/8 EIA) 60 (6-1/8 EIA) 65 (6-1/8 EIA)
Impedance (unbalanced)	Ω	50

MECHANICAL SPECIFICATIONS

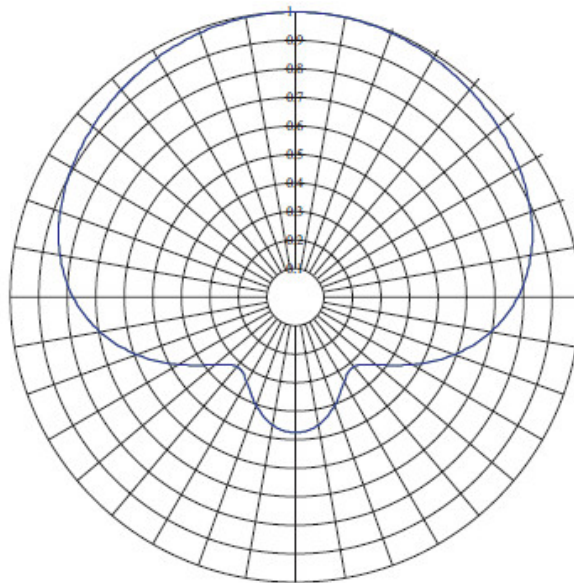
Input Connector		3-1/8" EIA and 6-1/8" EIA
Radome Diameter	mm (in)	381 (15)
Mounting (Standard)	mm (in)	Side, brackets supplied
Effective Area Comment		Note 1
Design Wind Speed	km/h (mph)	180 (50)
Wind Load Comment		Note 2, Note 3
Pressurization Operational	kPa (psi)	10-25 (1.4-3.6)
Pressurization Test	kPa (psi)	100 (15)

MATERIAL

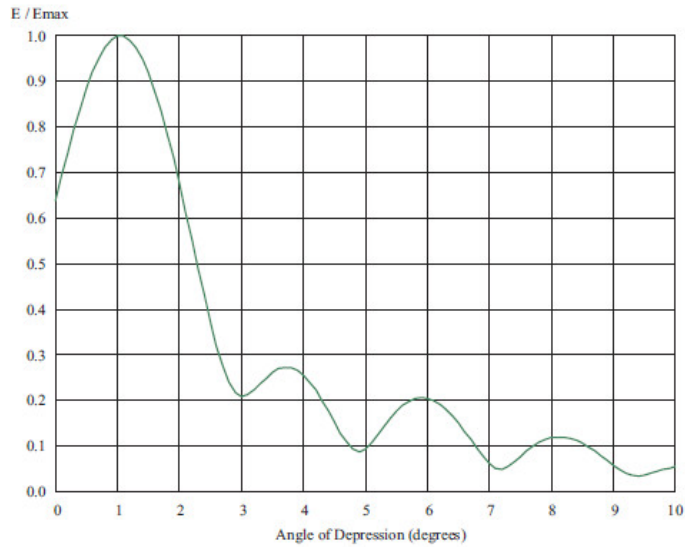
Material - Radome		UV Resistant Fibre Glass
Colour		White, other on request



Horizontal Radiation Pattern Cardioid 170



Horizontal Radiation Pattern Skull 180



Elevation Radiation Pattern typical 24 slots

[External Document Links](#)
[Complete Datasheet Specifications](#)

Notes

From External Document attachment

Note 1: CaAc is calculated using Ca=0.6 from ANSI/TIA-222-G, Table 2.8 based on supercritical flow. Contact a qualified structural consultant to confirm this applies to your installation.

Note 2: Calculated wind load is based on Australian Standard AS1170.2:2011

Antenna mounting pole and interface steelwork to tower is not included in calculations.

Note 3: Moment of arm from mounting pole to centre of antenna = 0.65m (2.1ft).

Note 4: Gain at 585 MHz (sum of HRP and VRP directivities).