

UHF Slot Antennas CBS Series

Product Description

Slot antennas are a popular method of providing versatile antennas for UHF TV broadcasting applications. They offer extremely low wind loading characteristics and thus, low cost support structures. They are also aesthetically pleasing, having a low profile while maintaining great strength for the most severe weather conditions. The RFS CBS series of slot antennas were developed for Band IV and V antenna applications, offering bandwidths up to 110MHz for multichannel operation. These antennas offer many advantages over comparable panel arrays. Of compact cylindrical construction they are ideal for use in situations where low wind loadings are a primary concern. Mounting to a single leg of a tower structure is possible and on site assembly, erection and aligning are relatively simple. Minimal maintenance is required.

Also available is a CBS7LP for low powered Band V repeater applications. The CBS7LP is of special lightweight construction with a simple 38mm stainless steel pole for mounting. It is rated to 200W maximum (type N input connector). An improved VSWR over 1 or 2 channels can be achieved by the addition of a tuning unit that is connected to the input terminal of the antenna.

Having a 7/8" EIA flange input (excepting the CBS7LP), plus the totally sealed fibreglass radome, these antennas are fully pressurizable and may be operated unpressurized by removal of a drain plug. They are base mounted, have considerable aesthetic appeal and have been designed to survive cyclonic conditions.

The standard CBS series is also available as a dual stack antenna (designated 2CBS series) with two CBS radiators stacked in a single fibreglass radome. Dual inputs are available on the 2CBS series as an option.



CBS7

Features/Benefits

- Copper/brass construction - stainless steel mounting interface
- Horizontal polarization
- Low wind loading
- Fully pressurized
- Multichannel operation is possible
- Temperature range -40 to +60 degrees C available

Technical Specifications

Product Line	Antenna TV
Product Type	Band IV/V (UHF) TV Slot Antennas
Frequency Range, MHz	470 - 536
Polarization	Horizontal
Nominal Gain (Mid-band), dBd	9.5
Return Loss, dB	20 Note #1
Input Connector	7/8" EIA Flange
Power Rating, kW	1.3
Null Fill (minimum), %	5
Beam Tilt, degrees	0
Impedance, ohms	50 unbalanced
Weight, kg (lb)	38 (84)
Dimensions (Height or Length), cm (in)	260 (102)
Radome Diameter, mm (in)	217 (8.5)
Base Diameter, mm (in)	336 (13.2)
Mounting (Standard), mm (in)	8 x 22mm (7/8) holes on a 292mm (11.5) PCD
Effective Area Front (full antenna), sq m (sq ft)	0.54 (5.8)
Wind Load @ 50 m/sec Front, kN (lb)	0.64 (140)
Pressurization Operational, kPa (psi)	10 - 25 (1.5 - 3.6)
Pressurization Test, kPa (psi)	100 (15)
Material - Radome	Fibreglass
Material - Support Pole / Mounting	Base Flange - Stainless steel
Material - Radiators	Brass
Colour	Radome colour white or grey

Notes

Note 1 Better than 26dB over limited bandwidth with additional tuning/cost.

Other Documentation

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