

V-BAND mm-WAVE ANTENNA

*Simplifying Integration in Radio
Systems*



The new V-Band antenna is dedicated for telecom applications and is ideal for integration in small cells, backhaul, fronthaul or WiGig radio systems. This highly directional antenna provides high gain from 57 to 66 GHz in a small form factor.

Radiall's V-Band mmWave antenna is perfectly suited for integration in new telecom systems, where small form factor and high gain are critical. This new solution provides 32dBi bore sight gain from 57 to 66 GHz coinciding with the normal axis of the antenna. This feature helps to facilitate quick and easy alignment between radio units (optical technology or not), which is mandatory for applications such as small cells, backhaul/fronthaul links and WiGig.

Designed for outdoor installation, this antenna is also tested per IEC 60068-2 environmental standard and is IP67 rated. The electrical design of the product makes it compliant with ETSI class 2.

Featuring unique transmit array technology embedded in the mmWave antenna, this solution allows quick customization of the antenna radiating pattern with a low investment cost. This greatly helps radio manufacturers to easily integrate the antenna into V-Band systems.



Radiall's V-Band is the best choice for telecom mmWave applications where highly directional gain, small form factor, and robust design are mandatory.

ELECTRICAL CHARACTERISTICS	
TEST / CHARACTERISTICS	VALUES / REMARKS
Frequency range (GHz)	57-66 GHz
V.S.W.R. (max)	< 1.5
Gain (typical)	32 dBi
Gain (min full band)	31 dBi
3dB beamwidth	3.5° x 3.5°
Side lobe level	ETSI Class 2
Polarization	Linear
Compliance standard	ETSI Class 2
Flange type	WR15 (UG-385/U)
Diameter	121 mm
Length	86.2 mm

FEATURES & BENEFITS

- Easy integration and customization in radio systems
- Small form factor
- Compliant with ETSI Class 2 requirements
- Standard wave guide interface
- Tested to meet IEC 60068-2 environmental standard
- IP67 rated

APPLICATIONS

- Small cells
- Backhaul & Fronthaul systems
- WiGig
- Fiber optics network replacement