E-BAND 38 dBi

Gapwaves antennas

Gapwaves offers millimeter wave antennas for use in the E-band based on Gapwaves patented waveguide technology platform. Due to the intrinsically low losses of Gapwaves waveguides the antennas offer high performance at minimum size.

Gapwaves antennas in summary

- Low profile and small size
- Low losses
- Broadband
- Tight integration with radio electronics for minimal radio unit size



Gapwaves Technology

The innovation in our solutions lies in the patented Gapwaves waveguide technology based on an Artificial Magnetic Conductor (AMC) surface that enables propagation of electromagnetic waves in contactless artificial waveguide structures. This is the key to designing high performance waveguide antenna structures with a high degree of flexibility using well-established, high-volume production processes.

The technology has its most advantages within radar antennas for automotive, last mile delivery and traffic managmement, phased array antenna solutions for 5G mmWave and products for test & measurements.

About Gapwaves

Gapwaves originates from research conducted at Chalmers
University of Technology and was founded in 2011. Gapwaves
vision is to be the most innovative provider of mmWave antenna
systems and the preferred partner to those pioneering next
generation wireless technology. By leveraging the disruptive
Gapwaves technology we help pioneers within the telecom and
radar antenna industry to create highly efficient mmWave antenna
systems that contributes to re-defining everyday life. Gapwaves
markets are e.g. mmWave in 5G telecom and radar antennas.

Technical specifications

Size	~118 × 118 × 8.2mm
Frequency range	71 - 86 GHz
Gain (mid band)	38 dBi
Connecting flange type	WR12
Antenna pattern	ETSI Class 3