## Ka-band

## Flange Adapter

Gapwaves offers an easy-to-mount flange adapter for the Ka-band. By using Gapwaves innovative waveguide technology the adapter removes the need of electrical contact and the need for screws. Sustainable to use in high-speed production lines, millimeter wave laboratories and high-frequency packaging.

## Gapwaves Flange Adapter in summary

- Saves time when assembling measurement circuits
- Low losses in high-frequency interfaces
- No electrical contact required


## 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.

## Electrical Specification

| Size | $19.1 \times 19.1 \times 14.7 \mathrm{~mm}$ |
| :--- | :--- |
| Frequency range | $26.4-40.1 \mathrm{GHz}$ |
| Waveguide size | WR28 |
| Return loss when tightly connected | $<-40 \mathrm{~dB}$ |
| Typical return loss with up to $100 \mu \mathrm{~m}$ airgap | $<-30 \mathrm{~dB}$ |
| Maximum transmission loss | $<-0.15 \mathrm{~dB}$ |
| Fully compatible with the standard | UG-599/U |

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[^0]:    *Including stearing pins ( 4.0 mm )

