

## High-Efficiency High-Power 270 – 320 GHz Frequency Doubler Type 211AX

### Product Description

Biasable High-Efficiency Frequency Doubler based on ACST high-power multiplier technology.

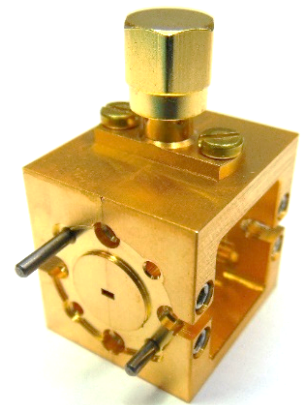


Fig. 1: Optical view of the product

### Application Areas

- Laboratory instrumentation
- MM-wave FMCW-Radar
- Active imaging
- LO Source for MM/SubMM wave heterodyne receivers

### Product Features

- High-Power & Efficiency
- Large bandwidth
- Flat response

Tab. 1: Technical Specifications

Technical Specifications	Minimum	Typ.	Maximum
Input Port (UG 387/U-M)		WR-6.5	
Input Frequency (GHz)	135		160
Input Power (mW)	40		280
Output Port (UG 387/U-M)		WR-3.4	
Output Frequency (GHz)	270		320
Output Power (mW)			90
Conversion Efficiency* (%)	15	25	30

\* Lower Efficiency may be expected at input power lower than specified and near the band edges.

## Notes

- All values presented are based on preliminary estimations.
- ACST Dedicated Bias Box included (requires DC voltage input).
- All tests are carried out at a room temperature of 24 °C.

## Caution

- Absolute maximum ratings should not be used under normal operating conditions. Exceeding maximum ratings may lead to permanent failure.
- Any foreign body inserted into the waveguide will cause a loss of performance and may damage the device.
- Bias Port is extremely ESD sensitive.

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Visit [www.acst.de](http://www.acst.de) for additional data sheets and product information.

