

PRODUCT DATASHEET · AT MICROWAVE

WR3 Waveguide Dual Directional Coupler

Full J-Band · 220 – 330 GHz · 10 dB Coupling · Model: AT-DC10-03V



PRODUCT OVERVIEW

AT Microwave offers high-performance, broadband directional couplers covering waveguide frequencies from 40 GHz to 500 GHz. Based on excellent design, precise machining tolerances and outstanding gold plating quality, these couplers combine low insertion loss, good return loss and high directivity across the full operating band.

bq-microwave distributes the complete AT Microwave coupler portfolio across Europe, covering Waveguide Dual Directional Couplers from WR19 to WR3, and Waveguide Couplers from WR22 to WR2.2 – with competitive pricing and short lead times.

KEY FEATURES

- Broadband performance across the full J-Band (220 – 330 GHz)
- Excellent coupling accuracy: ± 2.5 dB
- High directivity: typ. 20 dB
- Low insertion loss: typ. -2.5 dB
- Good return loss: -15 dB
- Gold-plated brass housing for durability and signal integrity
- WR-3.4 waveguide ports with UG-387/U-M Anti-Cocking flanges

RF SPECIFICATIONS

Frequency Range	220 – 330 GHz
Insertion Loss	typ. –2.5 dB / max. –3.5 dB
Coupling	10 dB
Directivity	typ. 20 dB
Return Loss	–15 dB
Coupling Variation	±2.0 dB
Coupling Accuracy	±2.5 dB
Operating Temp.	–40°C to +85°C
Storage Temp.	–55°C to +125°C

MECHANICAL DATA

Model	AT-DC10-03V
Input Port	WR-3.4 / UG-387/U-M
Output Port	WR-3.4 / UG-387/U-M
Case Material	Brass
Finish	Gold-plated
Weight	approx. 100 g

PRODUCT RANGE**Dual Directional Couplers:**

WR19 – WR3 (40 – 330 GHz)

Waveguide Couplers:

WR22 – WR2.2 (33 – 500 GHz)

**APPLICATIONS**

- 5G Communication Systems
- Test & Measurement Equipment
- RF Over Fiber (ROF) Systems
- Radar Systems
- mm-Wave & THz Research
- Satellite & Communication Links

WHY AT MICROWAVE & BQ-MICROWAVE?

AT Microwave (Shanghai AT Microwave Limited) is a leading manufacturer of precision mm-wave and THz waveguide components. With state-of-the-art CNC machining and gold plating, their products deliver consistent performance from prototype to production. bq-microwave is the authorized European distributor, offering fast delivery, technical support and competitive pricing across the full product range.

Request a Quote or Further Information

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