STE-144224KF1205-05-S1

G-Band X12 Frequency Extender, +5 dBm Output Power

STE-144224KF1205-05-S1 is a G-Band X12 frequency extender that uses an input frequency range of 11.6 to 18.3 GHz at +3 dBm along with harmonic generation and filtering to produce a 140 to 220 GHz RF signal. The extender is designed and manufactured as a bench top unit to extend the low frequency synthesizer or sweeper without losing all of the functionalities and features. The extender also features adjustable legs, which can also be removed, to allow for an easy test set up.

Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Output Frequency		140 GHz		220 GHz
Input Frequency		11.6 GHz		18.3 GHz
Output Power	140-150 GHz		+3 dBm	
	150-210 GHz		+5 dBm	
	210-220 GHz		-1 dBm	
Input Power			+3 dBm	+20 dBm
Input Return Loss			10 dB	
Output Return Loss			5 dB	
Harmonic Suppression			-15 dBc	
Spurious Suppression			-60 dBc	
Power Supply		100 V_{AC}		240 V_{AC}
Specification Temperature			+25°C	
Operating Temperature		0°C		+50°C

ECCN

3A001.b.7

FEATURES

- Full Waveguide Band Operation
- Low Harmonic Emission

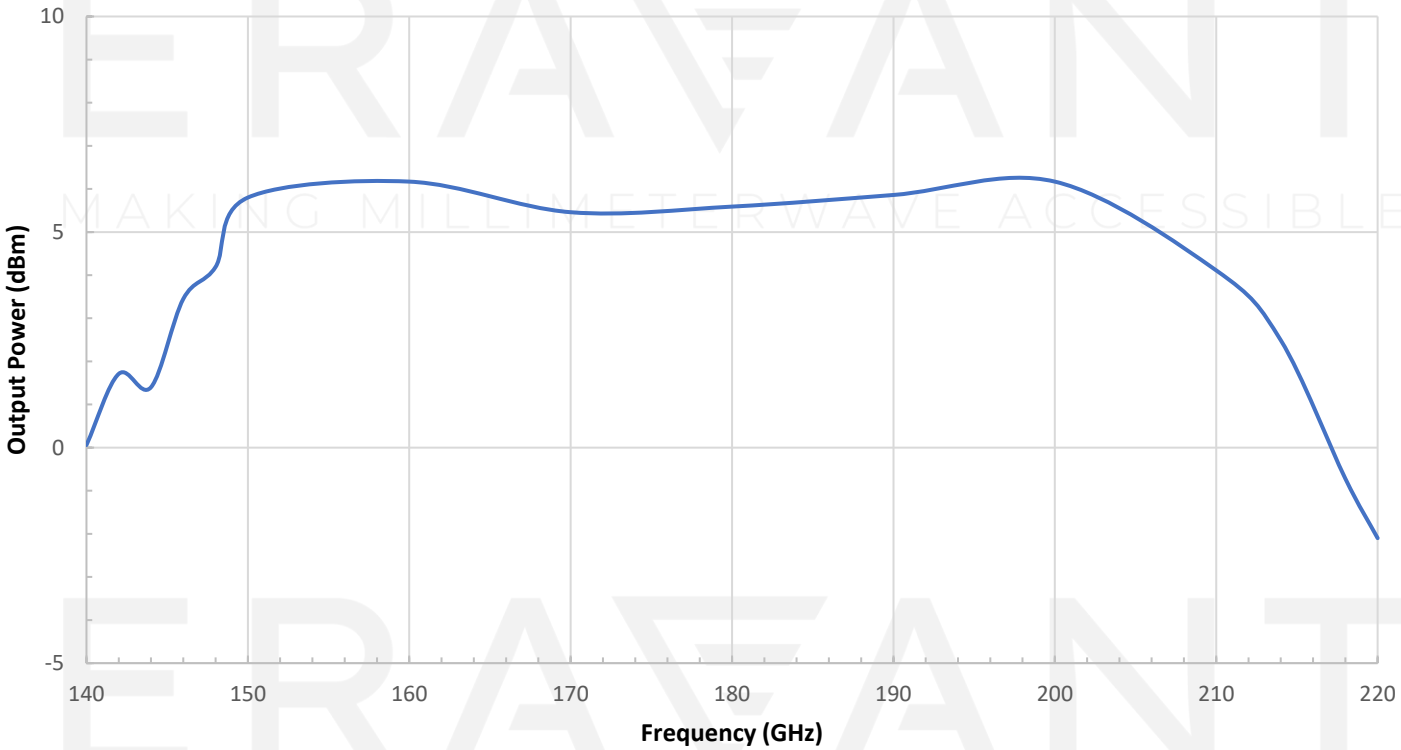
APPLICATIONS

- Test Lab
- Network Analyzer Systems
- Antenna Range

Mechanical Specifications:

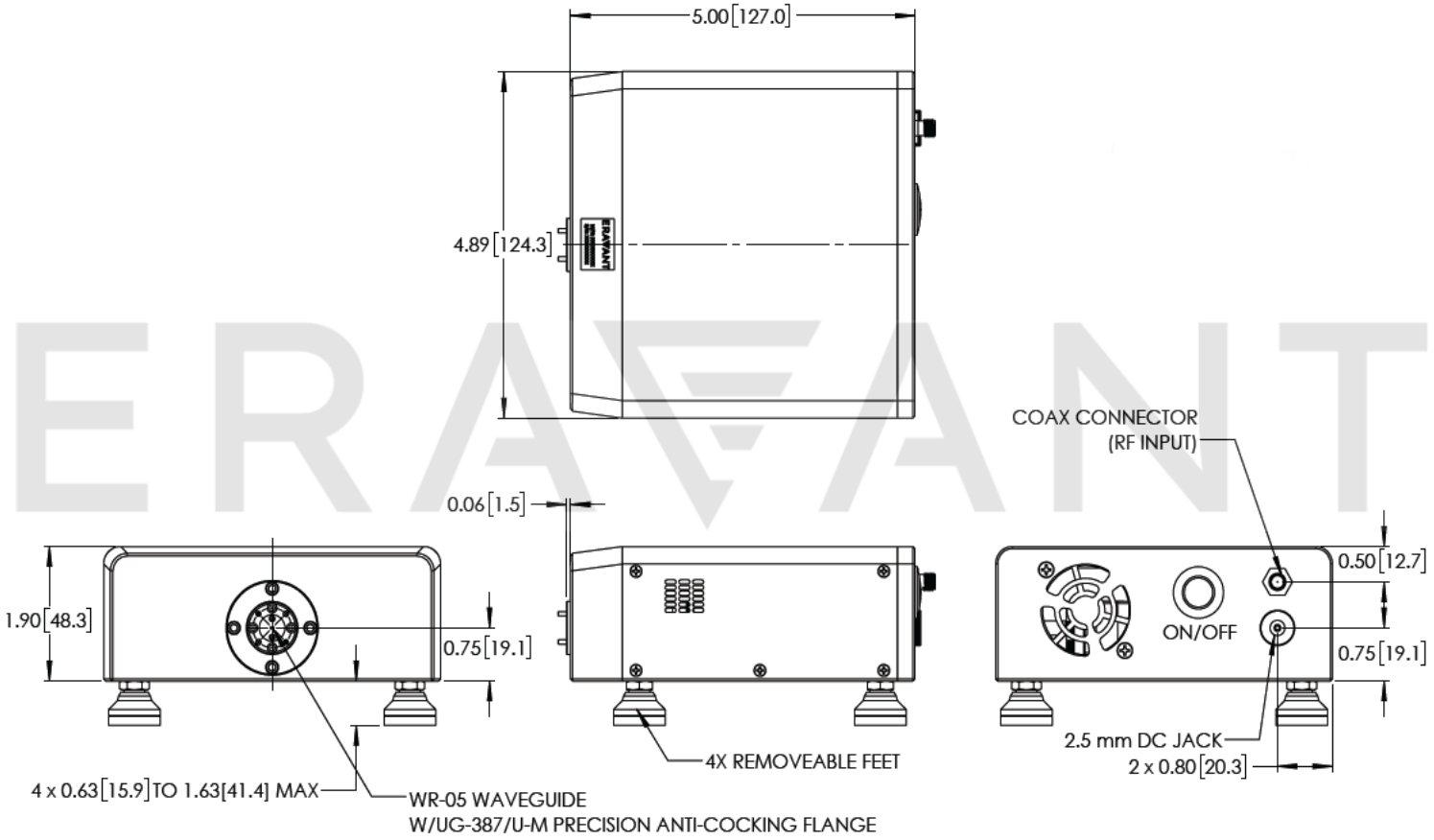
Item	Specification
Input Port	2.92 mm (K) Female
Output Port	WR-05 Waveguide with UG-387/U-M Precision Anti-Cocking Flange
DC Bias	2.5 mm DC Jack (AD to DC power converter included)
DC Bias Switch	Off-On Latching Switch with Indicator Light
Finish	Black Anodized
Weight	2.3 lbs
Outline	TE-G-A

Output Power vs. Frequency



Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended