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## WR-04 Noise Source with TTL, 15 dB ENR

**STZ-20423415-04-IT2** is a WR-04 noise source that delivers 15 dB nominal ENR across the frequency range of 195 to 230 GHz. The RF port has WR-04 Waveguide with UG-387/U-M Anti-Cocking Flange and the DC bias port is equipped with a female BNC connector, which is readily available for standard noise figure meter and noise figure analyzer interfaces. The noise source is designed with improved port return loss for more reliable and accurate noise figure measurements. The module can work also in either CW or pulse AM mode up to 1 kHz depending on the driving signal. The noise source features TTL triggering signal port for automatic test systems and a toggle switch to manually turn the module on and off. A Calibration Certificate for ENR values will be included.

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Input Frequency	195 GHz		230 GHz
ENR		15 dB	
ENR Flatness		±4 dB	
AM Modulation Rate		1 kHz	
Return Loss		13 dB	
DC Voltage	+15 $V_{DC}$	+28 V <sub>DC</sub>	+30 V <sub>DC</sub>
DC Current		50 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

### **Mechanical Specifications:**

Item	Specification		
RF Output Port	WR-04 Waveguide with UG-387/U-M Anti-Cocking Flange		
Bias Port	BNC (F)		
TTL Port	SMA (F)		
Power Switch	Toggle		
Material	Aluminum / Brass		
Finish	Gold Plated		
Outline	TZ-W04-A		





Excellent Return Loss

#### APPLICATIONS

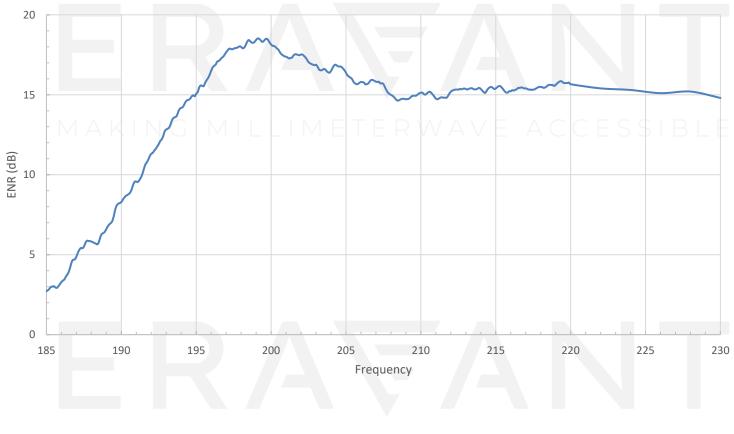
- Test Lab
- Instrumentations

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# **Included Accessory Components:**

Item	Eravant Model Number	Quantity
Waveguide Screwdriver, 3/32 Hex Head	SWH-332-DS	1
Waveguide Flange Hardware Kit		1
USB Flash Drive with Calibration/Test Data		1

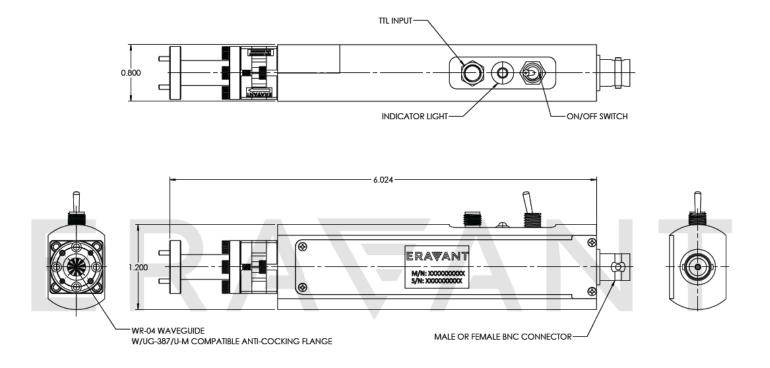
# **ENR vs. Frequency**



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



#### NOTE:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

#### CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.

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## Appendix: Case View with Included Components



# ERAFANS MILLIMETER WAVE ACCESSIBLE