STZ-65312415-10-IT2

WR-10 Noise Source with TTL, 15 dB ENR

STZ-65312415-10-IT2 is a WR-10 noise source that delivers 15 dB and 12 dB nominal ENR across the frequency range of 75 to 110 GHz and 65 to 116 GHz respectively. The RF port uses a WR-10 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	65 GHz		116 GHz
ENR (75 to 110 GHz)		15 dB	
ENR (65 to 75; 110 to 116 GHz)		12 dB	
ENR Flatness (75 to 110 GHz)		±2 dB	
AM Modulation Rate		1 kHz	
Return Loss		15 dB	
DC Voltage	+15 V_{DC}	+28 V_{DC}	+30 V_{DC}
DC Current		60 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Output Port	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Bias Port	BNC (F)
TTL Port	SMA (F)
Power Switch	Toggle
Housing Material	Brass
Housing Finish	Gold Plated
Weight	9.2 Oz
Outline	TZ-WW-A

ECCN

EAR99

FEATURES

- Full WR-10 Waveguide Operation
- Precision Calibrated and Flat ENR
- Excellent Return Loss

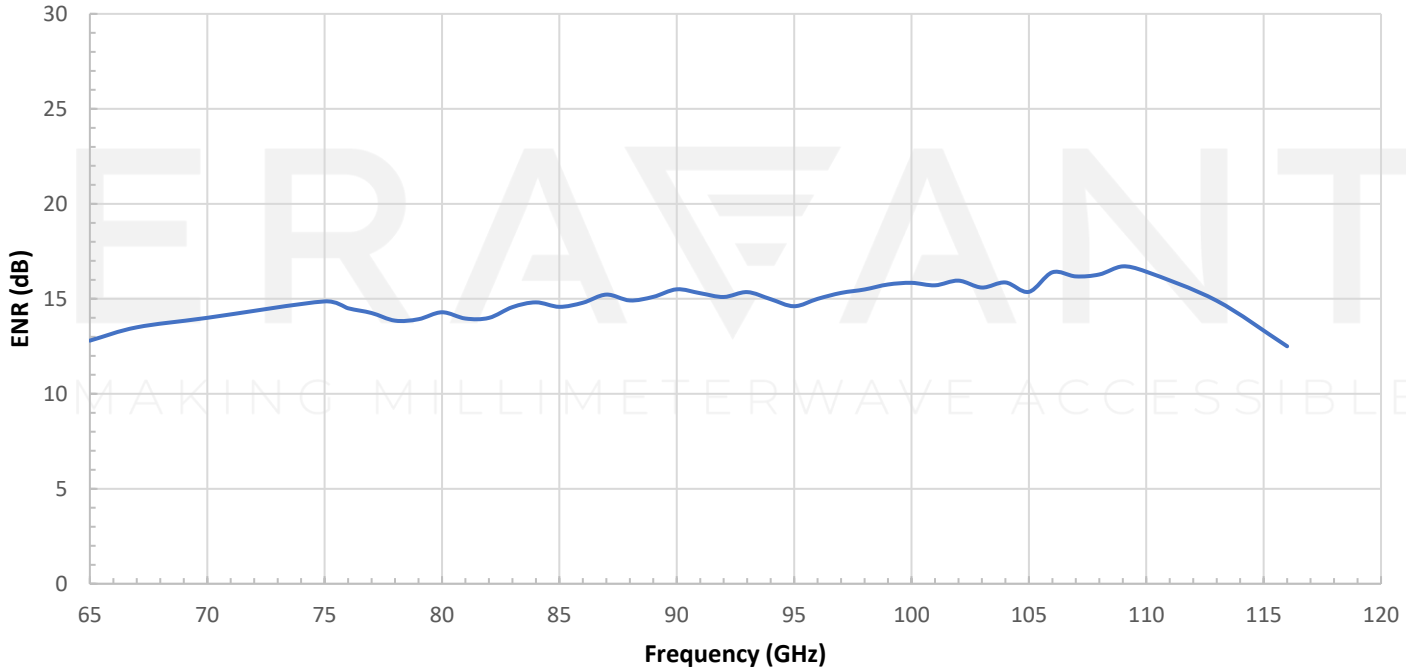
APPLICATIONS

- Test Lab
- Instrumentations

Included Accessory Components:

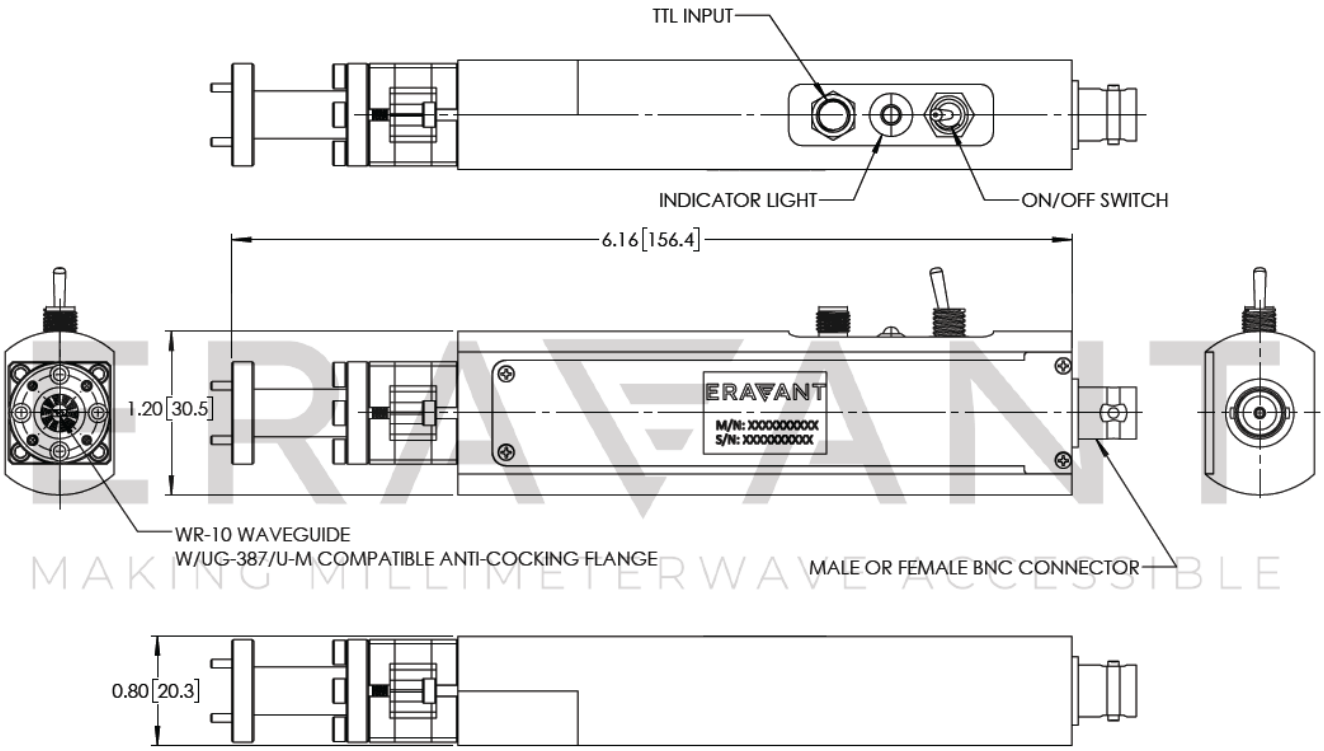
Item	Eravant Model Number	Quantity
Waveguide Screwdriver, 3/32 Hex Head	SWH-332-DS	1
Waveguide Flange Hardware Kit		1
USB Flash Drive with Calibration/Test Data		1

ENR vs. Frequency



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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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.
- If a waveguide is present, 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.

Appendix: Case View with Included Components