STZ-22432410-03-IT2

220 to 320 GHz Noise Source with TTL, WR-03, 10 dB ENR

STZ-22432410-03-IT2 is a WR-03 noise source that delivers 10 dB nominal ENR across the frequency range of 220 to 320 GHz. The RF port has WR-03 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 including tabulated ENR vs Frequency data will be provided.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Input Frequency	220 GHz		320 GHz
ENR		10 dB	
ENR Flatness (220 – 310 GHz)		±1.5 dB	
ENR Flatness (310 – 320 GHz)		±2.5 dB	
AM Modulation Rate		1 kHz	
Return Loss		13 dB	
DC Voltage	+15 V_{DC}	+28 V_{DC}	+30 V_{DC}
DC Current		50 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Output Port	WR-03 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-W03-A

ECCN

EAR99

FEATURES

- Precision Calibrated
- Excellent Return Loss

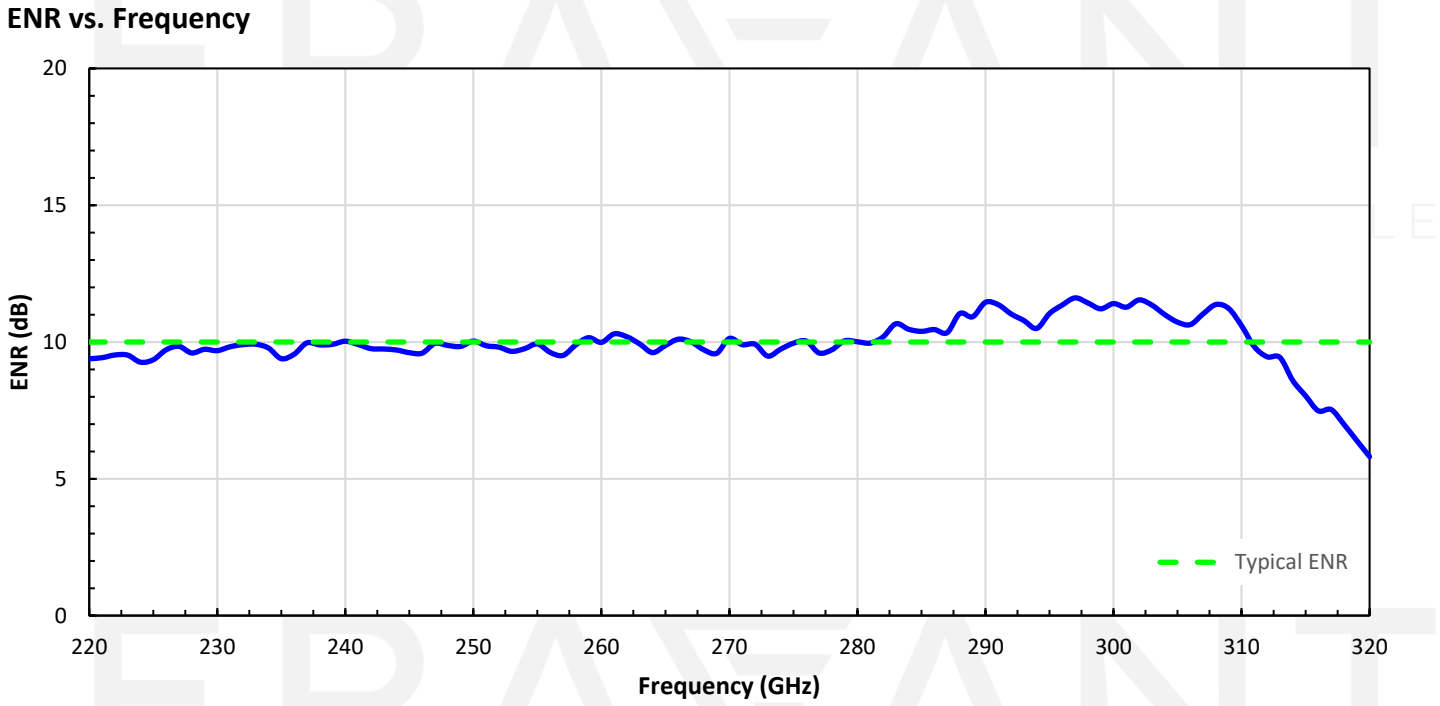
APPLICATIONS

- Test Lab
- Instrumentations

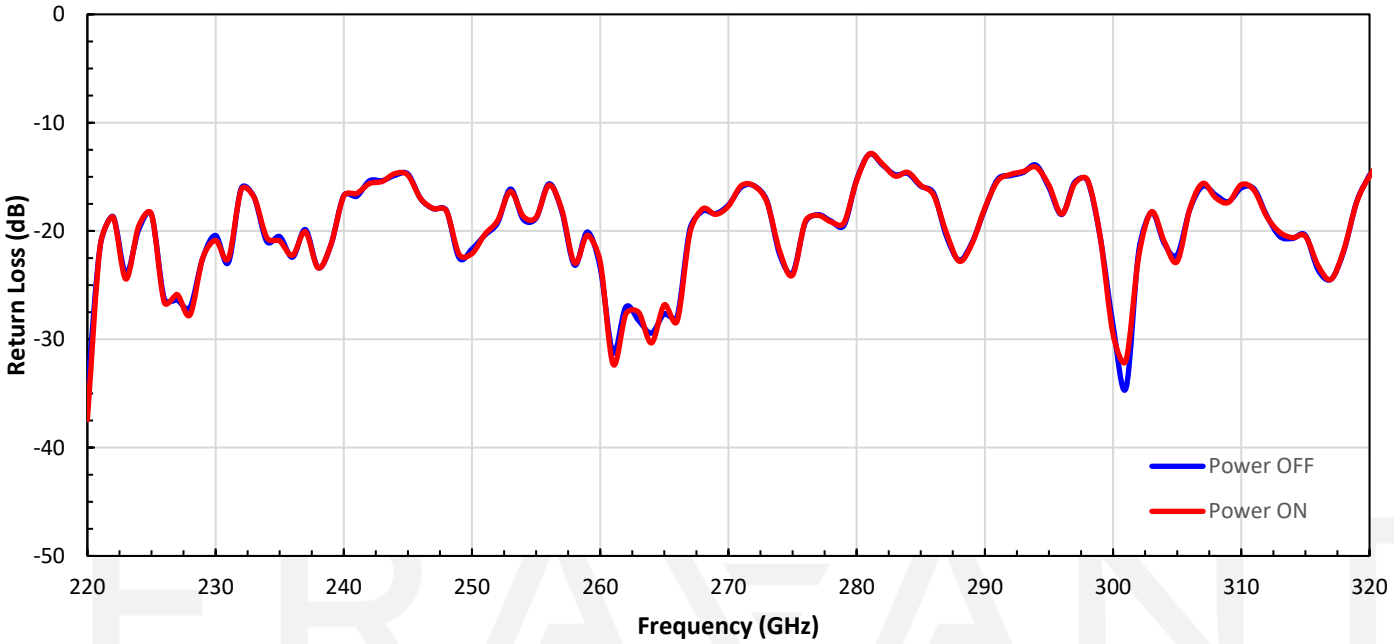
Included Accessory Components:

Item	Eravant Model Number	Quantity
Waveguide Screwdriver, 3/32 Hex Head	SWH-332-DS	1
Hex Torque Wrench	SCH-08008-S1	1
Waveguide Flange Hardware Kit		1
USB Flash Drive with Calibration/Test Data		1

Typical Noise Source Performance Plots :

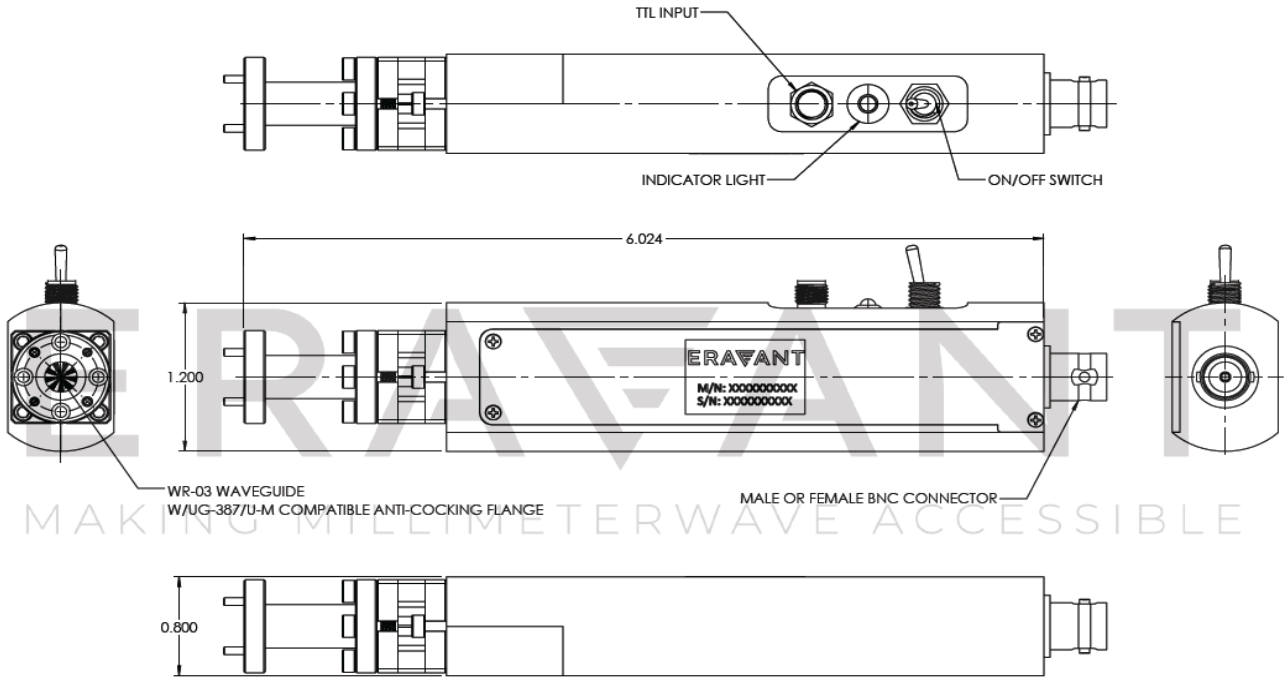


Return Loss vs Frequency

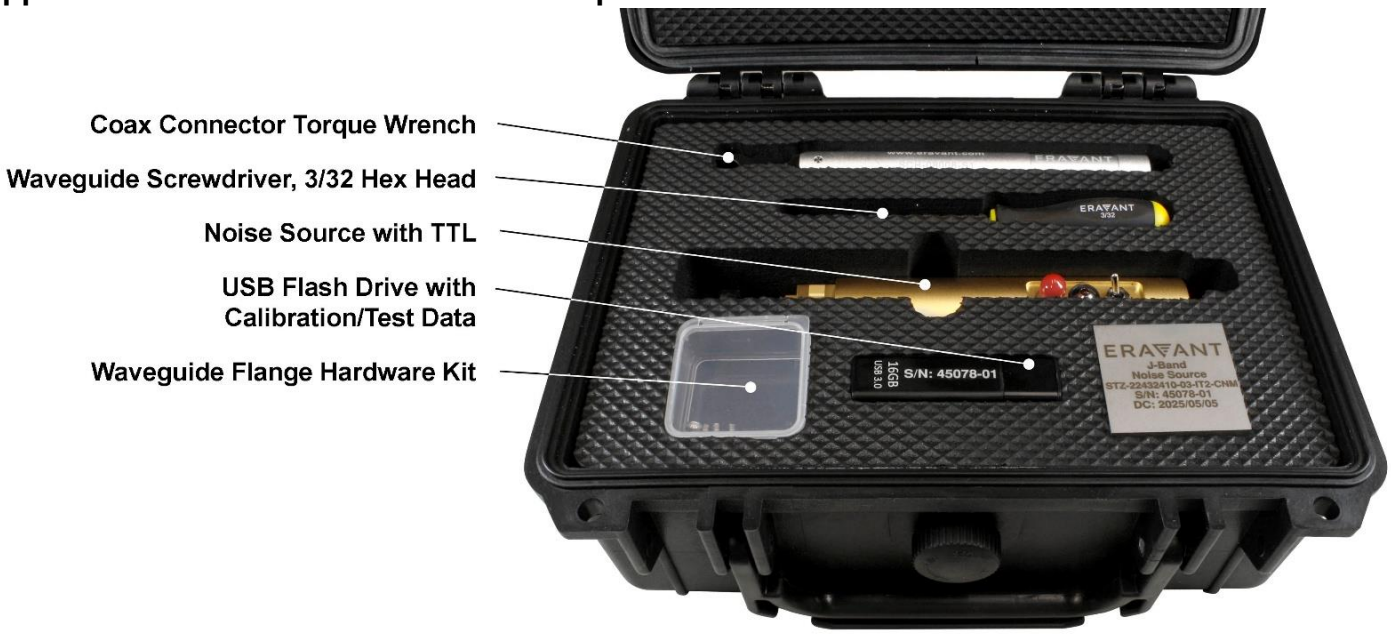


Mechanical Outline:

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



Appendix: Case View with Included Components



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.
- The **Power/Triggering Inversion Switch** of the noise is provided to manually turn the noise source on and off any time the **Bias** is applied. When the switch is in the “ON” position, the LED light will be illuminated.
- 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.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- The device is static sensitive. Always follow ESD rules when working with the device.