



## SMA Calibrated Noise Source Bench-Top, Output Pout of 0 dBm, +120 VAC, 1 MHz to 2 GHz

### Noise Generators Technical Data Sheet

PE85N1017

#### Features

- 1 MHz to 2 GHz GHz Bandwidth
- Manually Controlled White Gaussian Noise Instrument
- Simple Operation
- Output Power 0 dBm
- Flatness +/- 2 dB
- 10 dB Rotary Attenuator with 1 dB steps
- 120 VAC power supply
- Bench Top or Rackmount chassis
- Front panel support output Female SMA connector
- On/Off power switch
- Rotary Attenuator knob.

#### Applications

- System and Component Wireless Additive white Gaussian Noise and SNR testing
- signal simulation
- HDTV and CATV testing
- Bit Error Rate (BER) testing
- Military Applications

#### Description

The PE85N1017 is a general purpose calibrated noise instrument which operates over the frequency range of 1 MHz to 2 GHz. This instrument generates an output power level of 0 dBm with +/- 2 dB flatness. The design features a manually controlled 10 dB rotary attenuator with 1 dB adjustable steps, making it simple to operate with reduced test set up time. The instrument incorporates a precision noise source, amplifier, attenuator, and power supply, and delivers a repeatable, symmetrical white Gaussian Noise signal. The chassis design can be used for bench top or in a rack test station. Ideal for applications that include system and component wireless testing, signal simulation, HDTV and CATV testing, as well as a general purpose test source for Bit Error Rate (BER) testing. The power requirement is 120 VAC at 60 Hz and the operational temperature range is -20°C to +75°C. The rugged package supports an output female SMA connector, rotary dial for attenuation, and on/off AC power switch on the front panel.

#### Electrical Specifications

##### RF Characteristics

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.001		2	GHz
Impedance		50		Ohms
Flatness		±2		dB
Noise Attenuator (in 1 Steps)			10	dB
Output Power		0		dBm
Operating AC Voltage		120		VAC

Electrical Specification Notes:  
Output: White Gaussian Noise  
AC Power: Standard line voltages

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Calibrated Noise Source Bench-Top, Output Pout of 0 dBm, +120 VAC, 1 MHz to 2 GHz PE85N1017](#)



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### Mechanical Specifications

#### Size

Length	14.5 in [368.3 mm]
Width/Dia.	8.7 in [220.98 mm]
Height	5.25 in [133.35 mm]
Weight	10.7 lbs [4.85 Kg]

Package Type	Connectorized Module
Output Connector	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	-20 to +75 deg C
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Calibrated Noise Source Bench-Top, Output Pout of 0 dBm, +120 VAC, 1 MHz to 2 GHz PE85N1017](#)

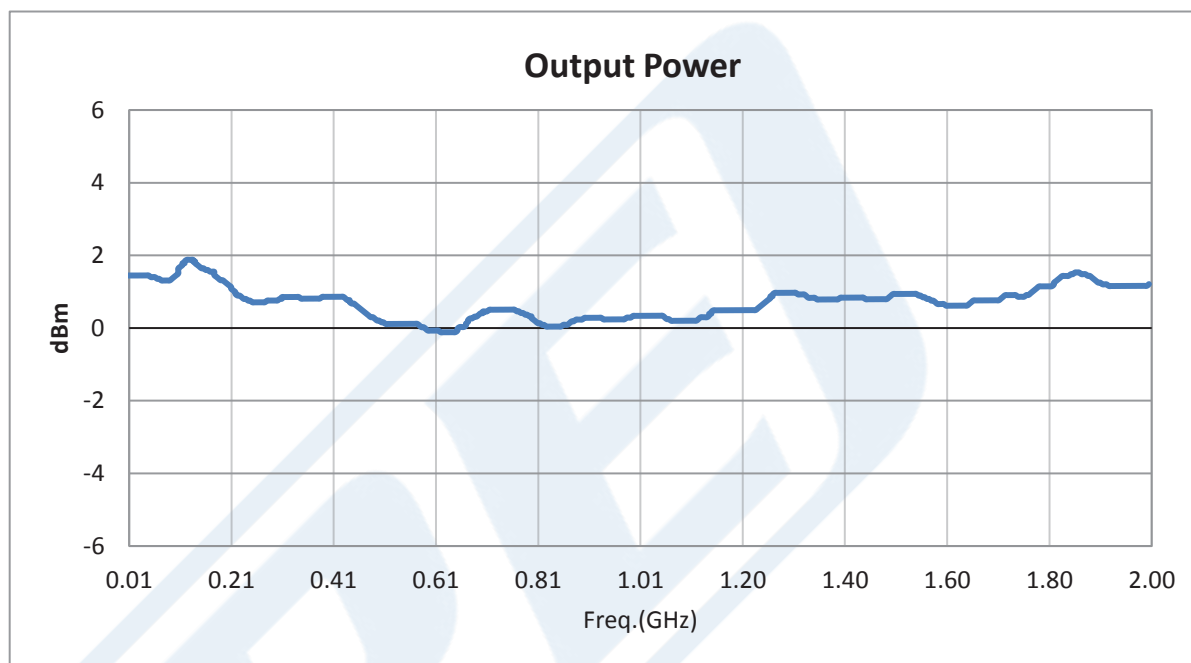


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### Typical Performance Data



SMA Calibrated Noise Source Bench-Top, Output Pout of 0 dBm, +120 VAC, 1 MHz to 2 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

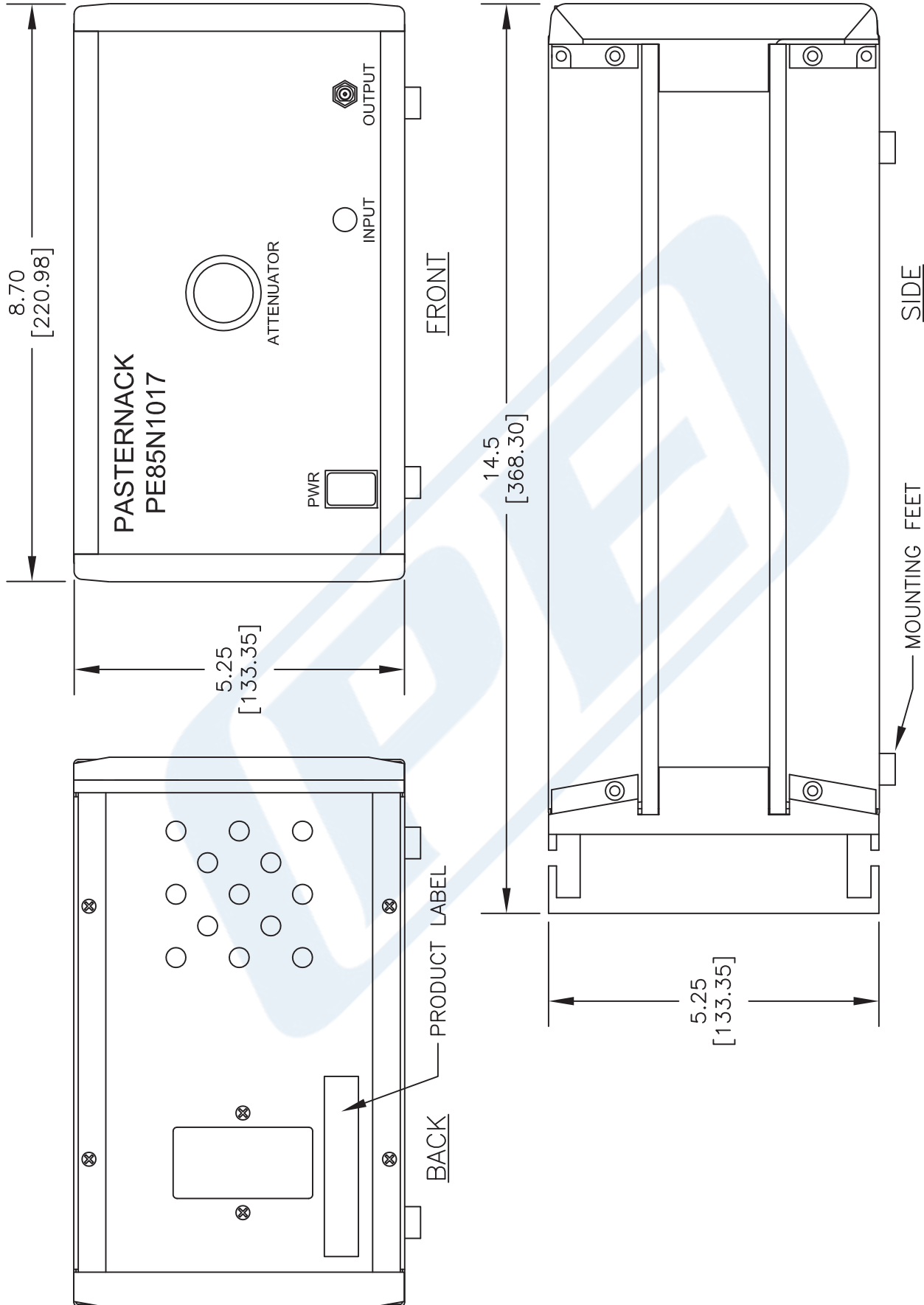
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE85N1017 CAD Drawing

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NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE

**PE85N1017**

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 011816

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE

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