

# 100MHz~40 GHz high power RF noise source module

## Description

HPNS040 is a high power Gaussian white noise source which operates over a frequency range from 0.1GHz to 40GHz and provides high noise power of ENR up to 60dB. Spectrum Magnetics LLC provides ENR calibration in 1GHz increments with low VSWR. The module of this source can operate under +5VDC with optional +28V BNC female connector.

### Feature

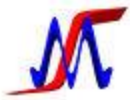
- 0.1GHz~40GHz frequency range
- Output ENR >50dB at 1GHz
- Flatness:<3dB at whole range
- 2.92mm male connector
- DC voltage
- Modulation

### Application

- Signal to noise ratio (SNR) measurement
- Noise figure measurement
- Bit error rate (BER) test
- EM environment simulation
- Measurement Instrument
- Jamming

Description	Min	typ	Max	Opt*	Unit
Frequency range at -3dB	0.1		42		GHz
Output ENR at 1GHz	48	50	52	>60	dB
Adjusted ENR range				40	dB
Ripple in 1GHz interval			0.3		dB
Flatness of ENR			3		dB
Output stability for 15minute/8hour	0.5/1.5				dB
Rise/Fall time for square modulation				5	ns
Impedance	50				ohm
Calibration frequency interval				1	GHz
RF Connector	2.92mm/K				
VSWR			1.9:1	<1.2:1	
Input Voltage (DC)	5			BNC 28	V
Operating temperature	0		60		C
Power consumption	10				W
Dimension	104 ×73×18				mm <sup>3</sup>

\*Please ask for specification with the option



## Order information

Order code		0	1	2	3	4	5	6	7												
H	P	N	S	0	4	0	-	-	-	1	9	-	2	-	1	-	3	-	1	-	3

0	high frequency at 3dB	>40GHz
	Code	040

		Standard				Optional
1	ENR (dB)	50	40	30		other*
	code	50	40	30		00

2	VEWR	1.9:1	Customized**
	code	19	00

3	connector	2.92mm/K male	
	Code	2	

4	Adjustable ENR	Fixed	Variable
	Code	1	2

5	Power supply	DC 5V	DC 28V with female BNC
	code	3	2

6	Modulation	No	Yes***
	code	1	2

7	Package	module	Customized
	Code	3	0

\* from 20 dB to 60dB

\*\* low to 1.2:1, ENR can't be guaranteed 50 dB

\*\*\* ENR is peak value. Customer has to define the modulating frequency

## Dimension (unit: mm)

