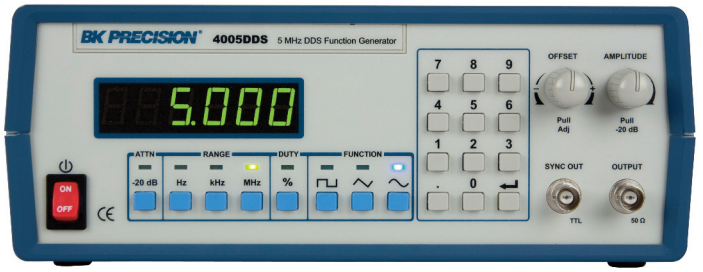
Data Sheet

5 MHz DDS Function Generator
Model 4005DDS



The B&K Precision model 4005DDS is a versatile 5 MHz DDS (direct digital synthesis) function generator with a 4-digit display. The instrument generates sinusoidal, triangular, and square waveforms over the 1 Hz to 5 MHz range. The output voltage can be varied from 0 to 10 Vp-p into 50 ohms or to 20 Vp-p into open circuit. A continuously variable DC offset allows the output to be injected directly into circuits at the correct bias level. These features make the 4005DDS great for education and other applications that need basic waveform generation.

Features and Benefits

- Frequency is selectable from 1 Hz to 5 MHz
- Sine, square, or triangle waveform output
- Direct digital synthesis (DDS) architecture
- Bright, easy-to-read LED display
- Number pad for quick input of frequency
- Front panel push button and pull knob can attenuate output by up to 40 dB

Kensington security slot helps secure your function generator and prevents theft.

Model	4005DDS
Frequency Characteristics	
Waveforms	Sine, Square, Triangle
Range	1 Hz to 5 MHz
Resolution	4 digits or 1 Hz
Accuracy	0.02% (200 ppm)*
Output Characteristics	
Impedance	50 Ω± 2%
Amplitude Range	Variable control from 20 mVpp to 20 Vpp (open circuit); 10 mVpp to 10 Vpp (into 50 Ω)
Attenuation	-20 dB ± 2%, -40 dB ± 2%
DC Offset	Variable ±10 V (open circuit); ±5 V (into 50 Ω)
Duty Cycle	Adjustable 20% - 80% to 3 MHz for square
Sine Wave	
Harmonic Distortion	-50 dBc, DC to 20 kHz -30 dBc, 20 kHz to 5 MHz
Flatness	± 0.3 dB to 1 MHz, ± 1 dB to 5 MHz
Square Wave	
Symmetry	± 2% to 100 kHz, ± 5% to 5 MHz
Rise Time	≤ 35 ns
Triangle Wave	
Linearity	≥ 98% to 100 kHz, ≥ 95% to 5 MHz
SYNC Output	
Level	≥ 3 V
Rise Time	≤ 25 ns
General	
AC Input	115/230 VAC, 50/60 Hz
Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)
Humidity	10% - 80% R.H.
Storage Temperature	-4 °F to 158 °F (-20 °C to 70 °C)
Storage Humidity	0% - 90% R.H.
Dimensions (W x H x D)	11" x 4" x 11.7" (279.4 x 101.6 x 297.2 mm)
Weight	5.05 lbs (2.3 kg)
	One-Year Warranty
Included Accessories	Instruction manual, power cord, BNC to BNC cable, BNC to alligator clips

*Applies to frequencies ≥ 1 kHz.

Note: All specifications apply to the unit after a temperature stabilization time of 15 minutes. Specifications and information are subject to change without notice.

www.bkprecision.com

BK PRECISION
ELECTRONIC TEST INSTRUMENTS