

Data Sheet

Function Generators
Models 4001A & 4003A



4001A



4003A

Models 4001A and 4003A are 4 MHz sweep function generators. The sweep function offers linear or log sweep with variable sweep rates and widths. The model 4003A has the addition of a 20 MHz 5-digit external frequency counter.

Features

- Generates Sine, Triangle, & Square waveforms from 0.5 Hz to 4 MHz
- 20 Vpp output into open circuit (10 Vpp into 50 Ω)
- TTL output <25 ns
- ± 10 V DC offset
- Variable amplitude output plus 20 dB attenuator
- Kensington security slot

4003A Additional Features

- CMOS variable level output
- 5-digit LED display
- Voltage Controlled Frequency (VCF) input



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



Model	4001A	4003A
MAIN OUTPUT		
Frequency Range	0.5 Hz to 4 MHz in 6 Ranges	
Waveforms	6 Waveforms (Sine, Square, Triangle, Ramp, +Pulse, -Pulse)	
Amplitude	0.2 Vpp - 20 Vpp (no load), 0.1 Vpp - 10 Vpp (50 Ω load)	
Attenuator	-20 db (±2%)	
Output Impedance	50 Ω (±2%)	
DC Offset	± 10 V (pull ADJ.)	
Distortion	<2%, 1 Hz to 100 kHz	
Rise/Fall Time	<90 ns	
VCF Input	0 to 10 V control	
SYNC OUTPUT		
Rise Time	<60 ns (TTL), <90 ns (CMOS)	
Level	approx. 3 Vpp (TTL), variable 4 Vpp - 14 Vpp [±0.5 Vpp] (CMOS)	
Waveforms	Square, Pulse	
SWEEP		
Mode	Linear/Log Sweep	
Width	1:1 to 1:100 Continuously Variable	
Rate	5s to 10 ms Continuously Variable	
Sweep Output	10 Vpp (open)	
Output Impedance	1 kΩ ±2%	
FREQUENCY COUNTER		
Display	-	5-digit LED display with Autorange
Resolution	-	0.01 Hz
MODE	-	INT Function Generator/EXT Counter
Accuracy	-	< 0.02% ± 1 digit
Frequency Range	-	0.2 Hz~20 MHz
Sensitivity	-	<30 mVrms (1 MHz), <200 mVrms (> 1 MHz)
Max Input	-	< 150 Vrms
Input Impedance	-	1 MΩ ±2%
Power Source	AC 115V/230 V +10%, 50/60 Hz	
Dimension	11" x 3.6" x 11.9" (279.4 x 91.4 x 302.3 mm)	
Net Weight	5.5 lbs. (2.5 kg)	
One Year Warranty		
Supplied Accessories: Power cord, user manual		