

# Data Sheet

## 20MHz DDS Sweep Function Generator with Arb Function Model 4045

The model 4045 DDS Function Generator is a must-have for anyone needing a low cost, full featured direct digital synthesis (DDS) function generator with arbitrary waveform capabilities. The 4045 has a menu-driven front panel interface that includes a large, easy-to-read graphical LCD display. Waveform parameter changes and data entry can be made using the rotary knob or via the built-in RS232 interface. The unit generates superb quality waveforms with high signal precision and stability. It provides sine & square wave outputs over the frequency range from 0.1 Hz to 20 MHz in one extended range (triangle/ramped wave outputs to 2MHz). Arbitrary waveforms can be edited from scratch or by modifying standard waveforms. A full range of triggering capabilities is available, including internal-external trigger source, gated and burst modes of operation.

- 20MHz Frequency Range (sine & square only)
- Sine, Square & Triangle waveforms
- Arbitrary waveforms to 1,000 points
- Clean, precise DDS waveform generation
- Modulation in both AM & FM
- Lin or Log Sweep Function
- Adjustable Duty Cycle
- Adjustable DC Offset
- Bright informative LCD
- Free downloadable software



Graphical LCD display

Model	4045
Frequency Range	0.1Hz to 20MHz (sine & square wave only)
Waveforms	Sine, Square, Triangle, Arbitrary, Ramp, Pulse
Amplitude	10V p-p into 50Ω
Attenuation	-20dB + 1dB
Offset	± 4.5V into 50 Ω (amplitude dependent)
Distortion	DC-20KHz = -55 dBc
Square Rise/Fall Time	< 18 ns (10% to 90%) into 50 Ω
Flatness	0.5 dB at 1MHz (1 dB to 20 MHz)
Power Source	90V-264V, 48-66Hz / 30 VA max
Dimensions (WxHxD)	8.4 x 3.5 x 8.3" (213 x 88 x 210 mm)
Weight	5.5 lbs, 2.5 Kg (approx.)

**One Year Warranty**

Included Accessories: Manual, software CD, RS232 cable, power cord, test report and certificate of calibration