

# TMI Systems

## 5MHz SIGNAL GENERATOR

Model: TM500

DDS Technology based digital waveform generation  
that can give accurate Frequency / Amplitude characteristics

Sweep and Arbitrary wave form generation mode  
using PC software for frequency

Inbuilt Frequency Counter



Frequency Range : 0Hz to 5MHz

Electronic Attenuators for -20dB, -40dB and -60dB

Output Voltage : 20V p-p

LCD based menu selection

## TECHNICAL SPECIFICATIONS

Frequency Range	Sine wave : DC – 5 Mega Hertz Square wave : DC – 3 Mega Hertz Triangle Wave : DC – 3 Mega Hertz Pulse Wave : DC – 3 Mega Hertz TTL Output : DC – 3 Mega Hertz
Waveforms	Sine Wave, Square Wave, Triangular Wave Pulse and TTL output.
Function Output	Sine, Square, Triangle and Pulse waves. Selectable through menu on LCD and from PC software connected to PC Serial port. Output Amplitude variable from 1 to 20Vp-p. -20dB,-40dB and -60dB attenuator can be used to get low level voltage outputs.
DC Offset and DC Output	The DC offset can be normally switched off , if DC coupling is used and user need to adjust the DC offset, then it can be done by switching on the DC offset switch and then adjusting the offset knob to desired level. The function generator can be used as a DC voltage source and the load can draw less than 100mA on any condition.
Pulse Output	The function generator can generate variable duty cycle pulse wave forms from 10 – 90 %. The output amplitude is variable from 0 – 20Vp-p (25V Max) on no load.
Counter Mode	0 – 3 MHz counting range with TTL/CMOS inputs to BNC at back panel. The measured frequency is displayed on front panel LCD.
Dial accuracy	100% digital control and a maximum of $\pm 0.1\%$ variation at normal operating condition.
Amplitude Precision	Sine wave variation for frequency <100 KHz $\pm 0.2\text{dB}$ and $\pm 1.0\text{dB}$ till 4 MHz. $\pm 2.0\text{dB}$ above this range.
Sine wave Distortion	Less than 0.2% till $\times 100$ kHz range and 0.5% and above beyond this range.
Square Wave Characteristics	Rise and fall time: <20ns
Square wave Distortion	Less than 1%
Power	200V – 240V AC 50Hz

\* SUBJECT TO CHANGE