



**Sciencetech 4063S 5MHz AM-FM Function -Pulse Generator with 50MHz Frequency Counter** are based on Direct Digital Synthesis technique to create stable and accurate output waveforms. They also offer linear ramp and square wave and pulse with fast rise/fall time. Generator also having built in Arbitrary waveforms to be used in various applications like Biomedical, Audio, Mathematics, etc. Front-panel operation is very user friendly. Internal Modulation makes it easy to modulate waveforms without the need of any separate modulation source. Linear sweep is also built in, with adjustable start frequency, stop frequency and sweep rate from 1ms to 100 sec. Sciencetech 4063S Function Generators are ideal partner for your laboratories.

### Applications

- Analog & Digital Communications
- Instrumentation and Control
- Embedded Systems
- Analog & Digital Circuit Design
- Education & Training
- Audio Circuit Design
- Bio-medical

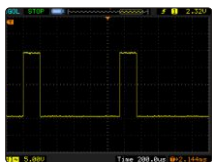
### Features

- DDS (Direct Digital Synthesis) Technique
- Frequency Resolution 1mHz
- Waveforms - Sine, Square, Triangle, Ramp, Pulse, TTL, Sinc, Cardiac, Blackman, Stair Up, Stair Down, Exponential Rise, Exponential Fall, Voice, Noise, Sine Vertical, Alternate Attenuation, Alternate Amplification, Round PM, Absolute Sine
- 50 MHz Frequency Counter
- Low Distortion
- 20Vpp Output (O.C.)
- Ethernet (optional)
- Internal Modulations & TTL
- TFT Color LCD Display
- Amplitude Readout
- Rise/Fall time  $\leq$  20ns
- High Accuracy
- 60dB Attenuation
- DCOffset

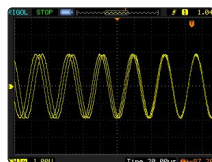
### Technical Specifications

Operating Modes	: Sine, Square, Triangle, Ramp, Pulse, Cardiac, Sinc, Noise, Exponential Rise, Exponential Fall, Blackman, Voice Negative Ramp, TTL, Sine Vertical, Alternate Attenuation, Alternate Amplification, Round PM, Absolute Sine
Frequency range (Sine Wave)	: 1mHz – 5MHz
Frequency range (other waveforms)	: 1mHz – 3MHz (Others)
<b>Frequency Resolution</b>	: 1mHz
Frequency Display Accuracy	: $\pm 0.2\%$
Sine wave Distortion	: $<0.5\%$ (20Hz-499Hz), $<0.3\%$ (500Hz-20KHz)
<b>Rise/Fall Time</b>	: $\leq 20\text{ns}$
Jitter	: 5nS (Square) & 10nS (Ramp & Pulse)
Triangle Non-Linearity	: $\leq 1\%$ (typical)
<b>Pulse Duty Cycle</b>	: 5% -95% Digitally Controlled
<b>Output</b>	: 20Vpp O.C., 10Vpp into 50 $\Omega$
Output Impedance	: 50 $\Omega$
Amplitude Readout	: $+ 5\% \pm 1$ digit
Attenuation	: 20dB/40dB Fixed & 20dB Variable (60dB Max.)
Level Flatness	: 0.5dB (3MHz)
DC Offset	: $\pm 5\text{V}$ adjustment
<b>Internal Sweep</b>	: 1ms-100s
<b>Internal Modulation</b>	: FM Modulation (with variable deviation frequency) AM Modulation (with variable depth of modulation) PWM Modulation
<b>Frequency Counter</b>	: 50MHz (External)
Sensitivity	: 0.5Vrms
Input Impedance	: 1M $\Omega$
Max. Input Voltage	: 200V (DC + AC Peak)
<b>Mains Supply</b>	: 230V AC $\pm 10\%$ , 50Hz
Power Consumption	: 20VA (approximately)
Dimension (mm)	: W 212 X H114 x D283
Weight	: 2Kgs (approximately)
Operating Conditions	: 0-40 $^{\circ}\text{C}$ , 85%RH
<b>Included Accessories</b>	: BNC to BNC cable & Power cord - 1 no. (each)
<b>Ethernet Interface (optional)</b>	: User can remotely control these Instruments

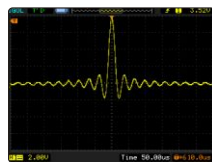
### Built in Waveforms



Pulse



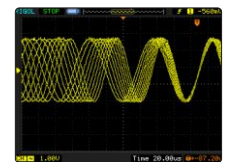
Sweep



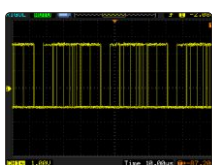
Sinc



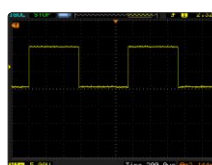
AM



FM



PWM



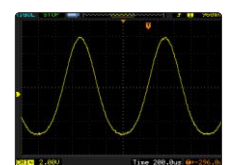
TTL



Cardiac



Stair Up



Blackman

and many more...