



Sciencetech 4062DM 10 MHz Function - Pulse Generator, with Color LCD display, fulfill today's demand of electronics laboratories in universities, colleges and training centres.

They have all ! whether you need Sine, Square, Pulse, Ramp in addition to 40 arbitrary waveform. Sciencetech 4062DM also provides internal and external AM-FM-PM-FSK PWM Modulation output. It has separate operations for function, frequency, modulation, pulse duty cycle.

Attractive design makes this new series an ideal choice for modern laboratories.

Features

- DDS technology
- Single-channel output
- Frequency resolution 1 μ Hz
- Display 4" colour LCD
- Vertical resolution 14 bits
- 5 types of standard output waveforms, and built-in 40 Arbitrary waveforms
- Modulation functions: AM, FM, PM, FSK, PWM sweep, & burst

Technical Specifications

Sine	:	10Hz -10MHz
Square	:	10Hz -5MHz
Pulse	:	10Hz -1MHz
Ramp	:	10Hz -1MHz
White Noise	:	5 MHz bandwidth (-3 dB) (typical)
Frequency Accuracy	:	Upto 3Hz \pm (1% +30), 3MHz \pm (0.1%)
Frequency Stability	:	<0.1% per hour or 0.2% per 24 hour at constant ambient temperature
Output channels	:	1 no.
Frequency resolution	:	1 μ Hz
Vertical resolution	:	14bit
Standard waveforms	:	Sine, square, ramp, pulse, and noise
Arbitrary waveforms	:	Sinc, staircase, staircase U, staircase D, etc.
Modulation mode	:	AM, FM, PM, FSK, PWM, Sweep & Burst

Output Characteristics

Amplitude	: 1 mVPP -12.5 VPP (50Ω)
Accuracy	: 1mVpp
DC Offset	: ± 6.25 V (50Ω) (AC+DC)
DC Offset Accuracy	: 2mV
Output Impedance	: 50Ω/600Ω selectable

Waveform Characteristics

Sine Wave

Harmonic Distortion	: <-40dBc at 1Vpp amplitude
Total Harmonic Distortion	: 10Hz to 20KHz < 0.2% at 1Vpp amplitude
Amplitude flatness	: 0.3Hz -0.3MHz : Max. ±0.2dB 0.3MHz -3MHz : Max. ±0.5dB 3MHz -10MHz : Max. ±3dB

Square

Rise/Fall Time	: <25ns (typical, 1KHz, 1Vp-p)
Overshoot	: <5%

Pulse

Pulse width	: 100ns to 1000ks 10% to 90%
Accuracy	: 15ns
Overshoot	: <5%
Rise/Fall time	: <25ns

Ramp

Linearity	: <0.1% of peak output (typical, 1kHz, 1Vpp, 50% symmetry)
Symmetry	: 0% to 100%

Modulation Characteristics

AM

Carries waveform	: Sine
Source	: Internal/fxternal
Modulating waveform	: Sine, square, ramp & arbitrary
Modulation depth	: 0%-100%
Modulating frequency	: 2mHz-20KHz

FM

Carries waveform	: Sine
Source	: Internal/external
Modulating waveform	: Sine, square, ramp & arbitrary
Modulating frequency	: 2mHz-20KHz
Frequency deviation	: 2mHz-1KHz

PM

Carrier waveform	: Sine
Source	: Internal/external
Modulating waveform	: Sine, square, ramp & arbitrary
Modulating frequency	: 2mHz-20KHz
Phase deviation	: 0°-180°

FSK

Carrier waveform	: Sine
Source	: Internal/External
FSK rate	: 2mHz-100KHz
Modulating waveform	: Square wave

PWM

Input	: +2V max(mod connector or rear panel)
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External Modulation Input

Input frequency	: DC-20KHz
Input voltage	: ± 1Vpk
Input impedance	: 10KΩ (typical)

Sweep

Carrier Waveform	: Sine, square, ramp
Type	: Linear, logarithmic
Direction	: Up or down
Sweep time	: 1ms -500s ± 0.2%
Trigger source	: Internal external or manual

Burst

Carrier waveform	: Sine, Square, Ramp, Pulse & Arbitrary
Type	: Count (1-50000 Periods), Infinite, Gated
Start phase	: -360° - +360°
Internal period	: 10ms-500s ± 2%
Gated source	: External trigger
Trigger source	: Internal / external manual

External Trigger Input

Level	: TTL compatible
Slope	: Rising, or falling
Pulse width	: >100ns

Frequency Counter

Function	: Frequency, period, positive pulse width, duty cycle
Frequency range	: 100mHz-200MHz
Frequency resolution	: 6 digits
Voltage sensitivity	: 500mVpp-3Vpp (AC+DC)
Pulse width & duty cycle	: 1Hz-10MHz (100mVpp-10Vpp)
Input impedance	: 1MΩ
Input coupling	: AC, DC

General Specifications

Display

Type	: 4" colour LCD
Resolution in pixels	: 480 (horizontal) x 320 (vertical)
Colour	: 65536 colours, 16 bits, TFT screen
Power voltage	: 220-240V AC 50Hz
Power consumption	: 20W approximately
Temperature	: 0 to 40°C, RH90%
Dimension (W x H x D)	: 235 mm x 110mm x 295 mm
Weight	: 3Kg. approximately