

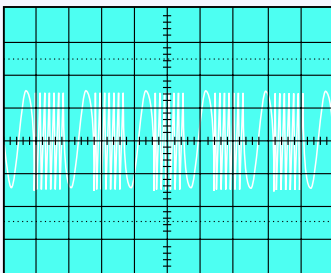
3 MHz Function Generator Counter with Power Supply SM5076 & SM5076-1



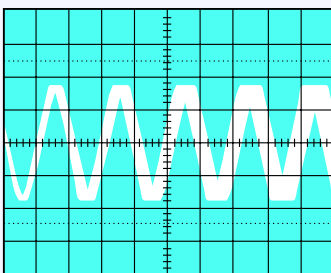
SM5076



SM5076-1



FM



Sweep Mode (FM)

- 0.3 Hz to 3 MHz Function Generator with sine , square, triangle, TTL & DC
- DC Offset adjustment
- Square wave Rise time better than 40 ns
- Microprocessor based design
- High signal purity and constant amplitude flatness throughout the entire range
- Internal and External Frequency Modulation
- 5 digit , Auto ranging 15 MHz Frequency Counter
- 50 mVrms sensitivity for stable display for external signal frequency
- DC Power Supply 2 x 15V/ 1A, 5V/1A
- Digital display of Voltage and current simultaneously in SM5076-1

An ideal test bench for lab use and service...

3 MHz Function Generator Counter with Power Supply SM5076 & SM5076-1

Technical Specifications

Function Generator

Operating Modes : Sine, Square, Triangle, DC, Free running, internal sweep or external frequency modulation, with or without DC offset,

Frequency Counter : Internal / External, Auto ranging

Power Supply :

DC Outputs : 5V / 1A , 2 x 15V / 1 A with digital display for voltage and current.

Function Generator :

Frequency Range : 0.3 Hz to 3 MHz

Frequency Stability : < 0.5% / hr or 0.8% / 24 hr at constant ambient temperature (medium position of frequency control)

Waveform Characteristics

Sine wave Distortion : 0.3 Hz - 100 kHz : max. 0.5 %
0.1 MHz-0.3 MHz : max. 1.5%
0.3 MHz - 3 MHz : max. 3%

Square Wave Rise time : typ. <40 ns

Overshoot : < 5%

Triangular non-linearity : <1% (up to 100 kHz)

Trigger Output : Square Wave synchronous to signal output, TTL > 4 Vpp

Frequency Display Accuracy : Up to 3 Hz : $\pm (1\% + 3 D)$
3 Hz - 3 MHz : $\pm (5 \times 10^{-5} + 1D)$

Output : (short-circuit-proof)

Output Voltage : 10 Vpp into 50 Ω , max. 20 Vpp open circuit

Attenuation : max. 60 dB, 2 steps : 20 dB \pm 0.2 dB each
Variable : 0 to 20 dB

Amplitude Flatness : (sine/triangle)

0.3 Hz - 0.3 MHz : max. 0.2 dB

0.3 MHz - 3 MHz : max. 0.5 dB

Output Impedance : switchable 50 Ω / 600 Ω

DC Offset : Variable offset range : max. \pm 2.5 V into 50 Ω ,
max. \pm 5 V open circuit

Frequency Modulation :

FM Input : VCF BNC connector on rear panel

Frequency Change : 1 : 100 approx.

Input Impedance : 50 k Ω || 25 pF

Input Voltage : \pm 30 V max.

FM Internal (Sweep) :

Sweep Speed : 20 ms to 4s ;

Sweep Range : approx. 1 : 100

Frequency Counter

Frequency Range : 10 Hz to 15 MHz

Accuracy : $\pm (5 \times 10^{-5} + 1D)$

Input Sensitivity : 50 mV_{rms} to 100 mV_{rms}

Max. Input Voltage : 150 V_{rms}

Input Impedance : 1 M Ω || 50 pF

Display : 4 digit for Function Generator and 5 digit for Frequency Counter, 0.5", 7 segment LED display

DC Power Supply

SM5076 : Without Digital readout for Power Supply

SM5076-1 : With Digital readout for Power Supply

Output voltage : 2 \times 15 V, 1 A, Adjustable from 2 to 15 V
+5 V, 1 A, Adjustable from 4.5 to 5.5 V
All supplies isolated from ground

Output current : 1 A each

Regulation : \pm 1%

Ripple and Noises : \leq 10 mVrms

Display : 3 digit Switchable , simultaneous display of voltage and current (SM5076-1)

Display Accuracy : $\pm (1\% + 1 d)$ (SM5076-1)

Overload indication is provided. Outputs are short circuit protected.

General Information

Supply : 230 V \pm 10%, 50 Hz (100/120/220/240 V available on request)

Operating Conditions : 0 to 50 $^{\circ}$ C, RH 95%

Dimensions : W:285, H:75, D:365 (mm)

Weight : 4.5 kg (approx.)

Accessories :

Manual : 1 no. , BNC- BNC - 1 no., Power cord :1 no.

Optional Accessories : 50 Ω Termination SA51 , BNC-Banana Cable

(subject to change)

SCIENTIFIC MES-TECHNIK PVT. LTD., B-14, Pologround, Industrial Estate, Indore-452 015 India.
Ph. : 0731-2422330/31/32/33 Fax : 0731-2422334, 2561641 e-mail : info@scientificindia.com

scientific[®]

Allahabad (0532) 2260833

Bengaluru (080) 23437635, 2331478

Chennai (044) 24424598, 42054180

Hydrabad (040) 27534995, 27534996

Mumbai (022) 24333654, 24211171

New Delhi (011) 65638100, 65638101

Pune (020) 26114688, 26132882

e-mail: allahabad@scientificindia.com

e-mail: banglore@scientificindia.com

e-mail: chennai@scientificindia.com

e-mail: hydrabad@scientificindia.com

e-mail: mumbai@scientificindia.com

e-mail: ndelhi@scientificindia.com

e-mail: chennai@scientificindia.com