

10MHz Function Generator HM8030-6



HM8030-6

Option H0801, page 41



Mainframe HM8001-2
required for Operation



- Frequency Range 50mHz...10MHz,
Output Voltage up to 10V_{pp} (into 50Ω)
- Waveforms: Sine Wave, Triangle, Square Wave, Pulse, DC
- Distortion Factor <0.5% up to 1MHz,
Rise and Fall Time typ. 15ns
- Internal and external Sweep, FM (with H0801)
- Surge- and short-circuit-proof Output

10 MHz Function Generator HM8030-6

All data valid at 23 °C after 30 minutes warm-up.

Operating modes

Sine, square, triangle, pulse; free running, internal sweep or external frequency modulation, with or without DC offset

Frequency ranges

0.05 Hz...10 MHz in 8 ranges, variable: x0.09 to x 1.1 (12:1)

Frequency drift: <0.5%/hr or 0.8%/24 hrs. at constant ambient temperature

Waveform characteristics

Sine wave distortion

0.05 Hz...1 MHz: max. 0.5%

1...10 MHz: max. 5%

Square wave rise time: typ. 15 ns

Overshoot: <5% (for termination into 50 Ω)

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

Displays

Frequency: 5-digit, 7-segment LED, each 8 x 5 mm

Accuracy:

up to 5 Hz: ±(3% + 3 digits)

5 Hz...10 MHz: ±(5 x 10⁻⁹ + 1 digit)

LED indicators for mHz, Hz, kHz and s

Outputs

Signal output: short-circuit proof
protected against ext. voltage up to ±45V_{dc} max. (30 s)

Impedance: 50 Ω

Output voltage: 10 V_{pp} into 50 Ω load; 20 V_{pp} (open circuit)

Attenuation: max. 60 dB

2 attenuators: each 20 dB ±0.2 dB

Variable: 0...20 dB

Amplitude error: (sine wave/triangle)

0.05 Hz...0.5 MHz: max. 0.2 dB

5 Hz...10 MHz: max. 2.0 dB

DC offset: variable (on/off, except pulse function)

into 50 Ω load: max. ±2.5 V

in open circuit: max. ±5 V

Trigger output: square wave synchronous to approx. +5V/TTL

FM input

[VCF, BNC connector on rear panel of HM8001-2 and option HO801]

Frequency deviation: approx. 1:100

Input impedance: 6 kΩ || 25 pF

Input voltage: max. ±30 V

Internal sweep

Sweep speed: 20 ms...15 s

Sweep range: approx. 1:100

Miscellaneous

Power supply +5 V/200 mA

(from mainframe): +16 V/300 mA

-16 V/250 mA

(Σ = 9.8 W)

Operating temperature: +5...+40 °C

Storage temperature: -20...+70 °C

Rel. humidity: 5...80% (non condensing)

Dimensions (W x H x D)

(without 22-pole flat plug): 135 x 68 x 228 mm

Weight: approx. 0.8 kg

Accessories supplied: Operator's Manual

Recommended accessories:

HZ20 Adapter, BNC to 4 mm banana

HZ22 Feed-Through Termination 50 Ω

HZ33 Test Cable 50 Ω (BNC-BNC) 0.5 m

HZ34 Test Cable 50 Ω (BNC-BNC) 1.0 m