

10 MHz Function Generator HM8030-6

HM8030-6



Option H0801



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 1 MHz, 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 minute 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: x 0.09 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 MHz...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 10⁻⁵ + 1 digit)

LED indicators for mHz, Hz, kHz and s

Outputs

Signal output: short-circuit proof, protected against ext. voltage up to ± 45 V_{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)

0.5 Hz...0.5 MHz: max. 0.2 dB
5 Hz...10 MHz: max. 0.5 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°C...+40°C

Storage temperature: -20°C...+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

Optional accessories:

HZ33/HZ34 Test Cable 50 Ω (BNC-BNC)

HZ22 50 Ω feed-through terminal

HZ10S/R Silicone test lead

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