

10 MHz Function Generator HM8030-6



Option H0801



HZ33, HZ34
Test cable BNC/BNC



HZ20 Connector
BNC to 4 mm socket



Frequency range 50 mHz to 10 MHz

High signal purity and amplitude stability

Distortion factor < 0.5 % up to 1 MHz

Output voltage 20 V_{pp} (10 V_{pp} into 50 Ω)

Surge- and short-circuit-proof output

Rise and fall time typ. 15 ns

Internal and external sweep

Pulse width adjustment

Highly accurate digital frequency display

Mainframe HM8001-2 required for operation

10 MHz Function Generator HM8030-6

Valid at 23 °C after a 30 minute warm-up period

Operating modes

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

Frequency ranges

0.05 Hz to 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 to 1 MHz: max. 0.5 %
1 MHz to 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: \pm (1 % + 3 digits)
5 Hz to 10 MHz: \pm (5 x 10⁻⁵ + 1 digit)

LED indicators for mHz, Hz, kHz and sec

Outputs

Signal output: short-circuit proof, protected against ext. voltage up to \pm 45 V_{DC} max. (30 sec.)

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 \pm 0.2 dB

Variable: 0 to 20 dB

Amplitude error: (sine wave/triangle)

0.05 Hz to 0.5 MHz: max. 0.2 dB
5 Hz to 10 MHz: max. 0.5 dB

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

into 50 Ω load: max. \pm 2.5 V
in open circuit: max. \pm 5 V

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

FM input

(VCF, BNC connector on rear panel of HM8001-2 and option HO801)

Frequency deviation: approx. 1:100

Input impedance: 6 k Ω || 25 pF

Input voltage: max. \pm 30 V

Internal sweep

Sweep speed: 20 ms to 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: +10° C to +40° C

Max. relative humidity: 80 % (without condensation)

Dimensions (W x H x D) (without 22-pole flat plug):

135 x 68 x 228 mm

Weight: approx. 0.80 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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