

**Specifications**

(Reference Temperature: 23°C ± 1°C)

**Frequency Range:**

**Frequency Range:** 20Hz to 20kHz

**Range Steps:** 3 Decade Steps

**Variable Frequency Control:** 10:1 (overlapping ranges)

**Distortion Measurement Range:**

**Measurement Range:** 0.01% - 50%

divided in 2 ranges

**Full Range:** 10% and 100%

**Resolution:**

100% Range: 0.1%

10% Range: 0.01%

**Accuracy:**

100% Range: ±5%±1 digit for k≤10%

10% Range: ±5%±1 digit for k≤1%

**Residual Distortion and Noise:**

≤ 0.5 digit

**Fundamental Rejection:**

30dB greater than measured distortion factor

or ≥70dB in the 100% range

or ≥90dB in the 10% range

**Input Voltage:**

min. for 100% Calibration: 300mV

max. for 100% Calibration: 50V

**Input Impedance:**

100kΩ

**Monitor Output:**

**Output Voltage:** 1mV/digit

(short circuit proof)

**Output Impedance:** 10kΩ

**Attenuators:**

(1 pushbutton switch) -20dB

(1 pushbutton switch) -10dB

(1 continuous variable attenuator) -15dB

**General Information:**

1 switch selectable high-pass filter 1kHz,

12dB/Octave

Supply Voltages (from HM8001):

+12V/60mA

-12V/60mA

+5V/100mA

(Σ = 1.94W)

**Operating conditions:**

0°C to +40°C

Max. Relative Humidity: 80%

**Dimensions** (without 22-pin flat connector):

**W**135, **H**68, **D**228mm

**Weight:** approx. 650g

Values without tolerances are meant to be guidelines and represent characteristics of the average instrument.

Subject to change without notice

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**Distortion Meter HM8027**

- Frequency Range: 20Hz to 20kHz
- Resolution: 0.01%, maximum
- Display: 3 Digit LED
- Automatic Frequency Fine-Tuning
- Monitor Output for Distortion Analysis

The **HM8027** Distortion Meter was developed for the measurement of harmonic distortion in the audio frequency range. Due to its **low inherent distortion** of **0.005%** (1kHz), it is ideally suited for tests and measurements of high-grade audio systems.

The digital display allows distortion readout with a maximum resolution of **0.01%**. In addition, the **HM8027** has the option to visually **check the residual distortion** of the measured signal on an oscilloscope connected to its control output. This feature enables a qualitative evaluation of the reading for signals with noise or cross-over distortion beyond the indicated distortion value.

Test frequency adjustments are performed via a rotary dial and push-button frequency range selectors. The **automatic frequency fine-tuning** with a 15% capture range ensures fast and easy operation of the **HM8027**.

The Distortion Meter **HM8027**, combined with the Sine Wave Generator **HM8037**, provides a complete test system to be used primarily in the audio frequency range. The clearly arranged front panel assures problem-free operation.

**Accessories supplied**  
Operators Manual

**Optional accessories**  
BNC test cable HZ33, HZ34  
Adaptor BNC-Banana HZ20