

# AC/DC MicroCurrent Probes

HHM80 Series

**\$559**

All Models



- ✓ Measures Extremely Low-Level DC, True RMS AC and DC + AC Currents from 100  $\mu$ A
- ✓ Outputs Signal Proportional to Total Current (DC + AC)
- ✓ Low Noise
- ✓ Ultra-Compact Size and Non-Contact, Clamp-On Convenience
- ✓ Simple Plug-In Operation
- ✓ Designed for Use With Digital Multimeters and Oscilloscopes
- ✓ Accurate Display of Wave Forms
- ✓ No Range or Mode (AC/DC) Switching Required
- ✓ Extended Battery Life
- ✓ Red LED Indicates Momentary or Continuous Overload
- ✓ Green LED Indicates Power and Battery Condition

Unlike traditional non-contact current probes, the HHM80 Series AC/DC MicroCurrent probes use the latest current measurement technology to give you accurate readings as low as 100  $\mu$ A, with clamp-on convenience.

Whether you are designing electronic circuits or measuring 4 to 20 mA process loops, there is no room for error. Until now, accurate non-contact, low-current measurements were nearly impossible, let alone trying to take them in tight spaces. The HHM80 Series features an ultra-compact design that will accurately measure low DC and AC currents in the hard-to-reach places found in today's circuitry, networks, 4 to 20 process control loops, and control panels. To observe your readings in real time, simply plug the HHM80 into your digital multimeter or oscilloscope and read directly.

## Specifications

### HHM81

#### Current Range:

0 to  $\pm 4.5$  A DC, 0 to 3 A rms

#### Output: 1 mV/mA

#### Accuracy:

DC: 1% reading  $\pm 200$   $\mu$ A

AC: 2% reading  $\pm 200$   $\mu$ A

#### Frequency Response:

DC to 2 kHz (@ -3 dB sine)

### HHM82

#### Current Range: 0 to $\pm 450$ mA

DC, 0 to 300 mA rms

#### Output: 10 mV/mA

#### Accuracy:

DC: 0.5% of reading  $\pm 150$   $\mu$ A

AC: 0.8% reading  $\pm 200$   $\mu$ A

#### Frequency Response: DC to 1500 Hz (@ -3 dB sine)

DC to 1500 Hz (@ -3 dB sine)

### HHM81 and HHM82

#### Electrical

##### Resolution:

DC: 50  $\mu$ A typical

AC: 100  $\mu$ A typical

##### Output Noise:

<100  $\mu$ V, DC to 5 kHz

##### Rise Time:

<200  $\mu$ S, 10% to 90% V out

##### Fall Time:

<200  $\mu$ S, 90% to 10% V out

##### Output Impedance: 200 $\Omega$

##### Influence of Adjacent Conductor:

<50  $\mu$ A/A

##### Probe Inductance: <1 $\mu$ H

##### Influence of Earth's Field:

<120  $\mu$ A, null to max

## Safety

#### Working Voltage: IEC 1010-2-31 Cat. II

#### Common Mode Voltage: 30 V

## General

#### Connectors: Two 4 mm banana

jacks, 19 mm (0.75") spacing

#### Maximum Conductor Diameter:

4.5 mm (0.187")

#### Overload LED (Red): For momentary

or continuous overload

#### Power LED (Green): For power on

and good battery



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omega.com



HHM81, \$559, shown smaller than actual size.

#### Zero Adjust: $\pm 25$ mA

#### Battery: One 9 V alkaline (included),

NEDA 1604 or IEC 6 LF22

#### Dimensions (Probe):

111 x 15 x 25 mm (4.4 x 0.6 x 1.0")

#### Dimensions (Module):

124 x 64 x 28 mm (4.9 x 2.5 x 1.1")

#### Weight: 250 g (9 oz)

#### Cable Length: 1.5 m (5')

#### Operating Temperature:

-10 to 55°C (-14 to 131°F)

#### Storage Temperature:

-40 to 80°C (-40 to 176°F)

#### Humidity:

<95% @  $\leq 35^\circ\text{C}$ , 75% @  $55^\circ\text{C}$

**MOST POPULAR MODEL HIGHLIGHTED!**

## To Order (Specify Model Number)

Model No.	Price	Description
HHM81	\$559	MicroCurrent probe, 4.5 A DC/3 A rms
HHM82	559	MicroCurrent probe, 450 mA DC/300 mA rms
HHM70-CONN1	38	Banana plug to BNC adaptor
EE-2500	60	Reference Book: Electric Engineering Handbook

Comes with 9 V battery and complete operator's manual.

Ordering example: HHM81, microcurrent probe and HHM70-CONN1, banana plug to BNC adaptor, \$559 + 38 = \$597.



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