



# Low Cost Handheld DMM's

- ✓ GS-Mark EN61010-1 Approval, Over-Voltage Category II 600 Vdc/Vac; Pollution Degree II
- ✓ Models: HHM26 and HHM28 have RS-232 Interface
- ✓ Safety Input Jacks
- ✓ Logic Probe Tester Models: HHM15, HHM20, HHM23
- ✓ Temperature Measurement Models: HHM19, HHM21
- ✓ Accuracy: Stated Accuracy at  $23 \pm 5^\circ\text{C} < 75\% \text{ RH}$
- ✓ Battery Life: 200 Hours
- ✓ Dimensions: 192 H x 91 W x 52.5 mm D (7.6 x 3.6 x 2.1")



**FREE!**

All temperature models include a free 36" type K beaded wire thermocouple with subminiature connector and wire spool caddy (one per channel)

Order a Spare! Model No. SC-GG-K-30-36, \$15



Extra Set HHM-TL General use test lead set. High quality design, \$5.



**HHM17**  
**\$120**

**HHM17 Auto-Ranging Multimeter**  
3999 counts resolution  
Provides: MEM, READ, REL, HOLD, MAX/MIN  
DC Volt: accuracy  $\pm 0.25\%$   
Resistance:  $\pm 0.3\%$   
Frequency:  $\pm 0.05\%$



**HHM18**  
**\$75**

**HHM18 Capacitance Meter**  
1999 counts resolution  
Zero adjustment  
Resistance:  $\pm 0.3\%$   
Capacitance:  $\pm 0.5\%$   
Frequency: 0.1%  
HHM18-TL Test leads for HHM18



**HHM22**  
**\$88**

**HHM22 Auto-Ranging Multimeter**  
3200 counts resolution  
Reading of Data-Hold function  
DC Volt: accuracy  $\pm 0.3\%$   
Resistance:  $\pm 0.3\%$



**HHM23**  
**\$78**

**HHM23 Rugged Multimeter**  
1999 counts resolution  
Reading of Max/Data-Hold function  
DC Volt: accuracy  $\pm 0.35\%$   
Resistance:  $\pm 0.4\%$ ; Frequency:  $\pm 0.1\%$



**HHM24**  
**\$75**

**HHM24 Rugged Multimeter**  
1999 counts resolution  
Reading of Max/Data-Hold function  
DC Volt: accuracy  $\pm 0.35\%$   
Resistance:  $\pm 0.4\%$   
Capacitance:  $\pm 2\%$ ; Frequency:  $\pm 0.1\%$

All multimeters include **free** protective rubber boot with tilt stand, set of safety test leads, 9 V alkaline battery, type K beaded wire thermocouple (temperature models only) and complete operator's manual



Measures Temperature



**HMM19F**  
for F°  
**HMM19C**  
for C°  
**\$95**

**HMM19 Rugged Multimeter**  
1999 counts resolution  
Reading of Max/Data Hold function  
DC Volt accuracy:  $\pm 0.35\%$   
Resistance:  $\pm 0.4\%$   
Frequency: 0.1%  
Comes with type K beaded thermocouple

Measures Temperature



**HMM20**  
**\$100**

**HMM20 Auto-Ranging Multimeter**  
4300 counts circulating record for Max/Min/Avg. and normal  
Provides: AUTO-HOLD, Relative and Relative Set  
Auto power off to conserve battery life  
DC Volt: accuracy  $\pm 0.25\%$   
Resistance:  $\pm 0.3\%$



**HMM21**  
**\$105**

**HMM21 Auto-Ranging Multimeter**  
4300 counts circulating record for Max/Min/Avg. and normal  
Provides: AUTO-HOLD, Relative and Relative Set  
Auto power off to conserve battery life  
DC Volt: accuracy  $\pm 0.25\%$   
Resistance:  $\pm 0.3\%$   
Comes with type K beaded thermocouple

With RS-232 Interface



**HMM26**  
**\$113**

**HMM26 Auto-Ranging Multimeter**  
2500 counts Backlit LCD Display  
RS-232C Interface  
w/Microprocessor-based DMM  
DCV Basic accuracy up to  $\pm 0.25\%$   
ACV Basic accuracy up to  $\pm 0.75\%$

With RS-232 Interface



**HMM27**  
**\$113**

**HMM27 Auto-Ranging Multimeter**  
2500 counts Backlit LCD Display  
Resistance accuracy up to  $\pm 0.3\%$   
w/Microprocessor-based DMM  
Frequency resolution up to 0.001 Hz  
Frequency accuracy up to  $\pm 0.05\%$   
DCV Basic accuracy up to  $\pm 0.25\%$   
ACV Basic accuracy up to  $\pm 0.75\%$



**HMM28**  
**\$138**

**HMM28 Auto-Ranging Multimeter**  
2500 counts, Backlit LCD Display  
RS-232C Interface  
w/Microprocessor-based DMM  
Frequency resolution up to 0.001 Hz  
Frequency accuracy up to  $\pm 0.05\%$   
DCV Basic accuracy up to  $\pm 0.25\%$   
ACV Basic accuracy up to  $\pm 0.75\%$

All multimeters include **free** protective rubber boot with tilt stand, set of safety test leads, 9 V alkaline battery, type K beaded wire thermocouple (temperature models only) and complete operator's manual



# Low Cost Handheld DMM's

**.1 YEAR WARRANTY**

**HHM11 \$79**



**HHM11 Rugged Multimeter**  
1999 counts resolution  
DC Volt accuracy  $\pm 1.2\%$   
AC Volt accuracy  $\pm 2.0\%$   
DC current accuracy  $\pm 2.5\%$   
Resistance:  $\pm 1.5\%$   
Diode test, transistor, battery test

Measures Temperature

K type beaded wire T/C included

**HHM12 Auto-Ranging Multimeter/Thermometer**

1999 counts resolution  
DC Volt accuracy  $\pm 1.2\%$   
AC Volt accuracy  $\pm 2.0\%$   
Resistance:  $\pm 1.0\%$   
Diode test, capacitance, continuity, phase indicator, frequency, temperature measurement type K thermocouple

**HHM12 \$89**

**YEAR 2000 COMPLIANT**



All models shown with test leads included

Measures Temperature

K type beaded wire T/C included

**HHM16 \$98**



All K Type Models Supplied with **Yellow Rubber Boot**; All Others Are Black

**HHM13 \$49**

**HHM13 Rugged Multimeter**  
3200 counts resolution  
Analog bargraph, auto power off, overrange  
DC Volt accuracy  $\pm 1.2\%$   
AC Volt accuracy  $\pm 2.0\%$   
Diode test, Ohms, capacitance, continuity

All multimeters include **free** protective rubber boot with tilt stand, set of safety test leads, 9 V alkaline battery, type K beaded wire thermocouple (temperature models only) and complete operator's manual





Extra Set HHM-TL  
General use  
test lead set.  
High quality  
design, \$5.



Measures  
Temperature



HHM14  
\$136



HHM15  
\$113



HHM29  
\$138

K type  
beaded  
wire T/C  
included

### HHM14 True RMS Multimeter

4½ digits 20000 counts Ac Volt  
frequency response up to 20 kHz  
**DC Volt:** 0-200 mV/2/20/  
200/1000 V ±0.05%  
**AC Volt:** 0-200mV/2/20/200/750 V  
±1.5% 50~20 kHz  
**DC current:** 2/20/200 mA  
±0.5% 10 A ±2%  
**AC current:** 0-200 mA/2/20/200 mA  
±1% 10 A ±2.5%  
**Resistance:**  
0-20/200 Ω 1%  
2/20/200/2000 kΩ ±0.2%  
20 MΩ ±2%  
**Continuity:** < 40 Ω ± 20 Ω  
Diode test function  
1000 Vdc/750 Vac  
overload protection  
500 V overload protection  
in Diode, Ohm, Continuity  
10 A fused protection

### HHM15 Rugged Multimeter

3½ digits 3999 counts  
**DC Volt:** 0-400 mV/4/40/400/  
1000 V ±0.5%  
**AC Volt:** 0-400 mV/4/40/400/  
750V ±1.5%  
**DC current:** 0-40 m/400 mA/10 A ±1.5%  
**AC current:** 0-40 m/400 mA/10 A ±2.0%  
**Resistance:** 0-400 Ω/4/40/400/  
4000 kΩ/40 MΩ/4000 mΩ ±1%  
**Capacitance:** 0-4 nF/40 nF/400 nF/  
4µF/400 µF ±5%  
**Inductance:** 0-4 m/40 mH/400 mH/  
4 H/40 H ±5%  
**Frequency:** auto-ranging  
up to 1 MHz±0.5%  
Diode test function  
**Continuity:** <40 Ω ±20 Ω  
1000 Vdc/750 Vac  
overload protection  
500V overload protection  
in Diode, Ohm, Hz, Continuity  
hFE test function  
Logic probe function

### HHM29 Rugged Multimeter

4300 counts circulating record  
for MAX/MIN AVG and normal  
**Provides:** AUTO-HOLD, Relative  
and Relative Set  
Auto power off to preserve  
battery life  
**DC Volt:** 0-430 mV/4.3/43/430/  
1000 V ±0.25%  
**AC Volt:** 0-430 mV/4.3/43/430/750 V  
±0.75~1.5% (50 Hz~20 KHz)  
**DC current:** 0-430 µA/43 mA±0.5%  
430 mA/10 A±2%  
**AC current:** 0-430 µA/43 mA  
±1% 430 mA/10A±2.5%  
**Resistance:**  
0-430 Ω/4.3/43/430 k/4300 kΩ/  
43 MΩ±0.3%  
**Capacitance:** 0-4.3/43/430 nF/  
4.3 µF/430 µF±5%  
**Inductance:**  
0-4.3/43/430 mH/4.3/43 H ±5  
**Frequency:** 430 Hz/4.3/43/430 kHz ±1%  
**Temperature:**  
-20~1370°C -4~2372°F ± 2~3%  
Comes with beaded type K  
thermocouple  
Diode test function  
Continuity: < 50 Ω  
1000 Vdc/750 Vac  
overload protection  
500 V overload protection in Diode,  
Ohm, Hz, Continuity  
Logic probe tester



**FREE!**

All temperature models include a free  
36" type K beaded wire thermocouple  
with subminiature connector and wire  
spool caddy (one per channel)

Order a Spare! Model No. SC-GG-K-30-36, \$15

**All K Type Models  
Supplied with Yellow  
Rubber Boot; All  
Others Are Black**

**Ordering Example: HHM29 Rugged DMM with K type T/C, includes test leads & rubber boot; \$138**

All multimeters include **free** protective rubber boot with tilt stand, set of safety test leads, 9 V alkaline battery, type K beaded wire thermocouple (temperature models only) and complete operator's manual.



**HHM30**  
**\$120**



**HHM30 LCR Multimeter**

3½ digits 1999 counts

**Resistance:** 20 Ω/200 Ω/  
2 kΩ/20 kΩ/200 kΩ/2 MΩ/20 MΩ

**Accuracy:**

20 Ω: ± (1.0% rdg + 10 dgts)

200 Ω: ± (0.3% rdg + 3 dgts)

2 kΩ to 2 MΩ: ± (0.3% rdg + 1 dgt)

20 MΩ: ± (2.0% rdg + 2 dgts)

**Capacitance:**

200 pF/2 nF/20 nF/

200 nF/2 μF/20 μF/

200 μF/2000 μF

**Accuracy:**

200 pF to 200 nF:

± (1.0% rdg + 3 dgts)

2 μF to 200 μF:

± (2.0% rdg + 3 dgts)

2000 μF to ≤ 1000 μF:

± (3.0% rdg + 3 dgts)

> 1000 μF:

± (5.0% rdg + 5 dgts)

**Inductance:**

200 μH/ 2 mH/20 mH/

200 mH/2 H/20 H/200 H

**Accuracy:**

200 μH to 200 mH:

± (3.0% rdg + 3 dgts)

2 H to 200 H:

± (5.0% rdg + 10 dgts)

**To Order (Specify Model Number)**

	Model No.	HHM11	HHM12	HHM13	HHM26	HHM27	HHM28	HHM17	HHM18
	Price	\$79	\$89	\$49	\$113	\$113	\$138	\$120	\$75
F	Display Counts	1999	1999	3200	2500	2500	2500	3999	1999
E	Range Auto/Manual	M	M	M	A	A	A	A	M
A	Input Impedance MΩ	1	10	10	10	10	10	10	
T	Analog bargraph			•				•	
U	Relative				•	•	•	•	
R	Logic Test								
E	Temperature		C/F						
	Data/Hold				•	•	•	•	•
	MAX/MIN Record							•	
	MAX/HOLD								•
	Capacitance		•	•		•	•	•	•
	Frequency		•	•		•	•	•	•
	Continuity		•	•	•	•	•	•	•
	Diode test	•	•	•	•	•	•	•	•
	Transistor gain (hFE)	•						•	
	RS-232C				•		•		
DCV	Basic accuracy, %	1.2	1.2	.8	0.25	0.25	0.25	0.25	
	MAX. Resolution, μV	1000	1000	100	100	10	10	100	
ACV	Basic accuracy, %	2	2	2	0.75	0.75	0.75	0.75	
	MAX. Resolution, μV	100	100	100	100	100	100	100	
	Frequency Response, Hz	50-500	50-500	50-500	50-500	50-500	50-500	50-20K	
DCA	Basic accuracy, %	2.5			0.75	0.75	0.75	0.5	
	MAX/Resolution, μA	1000			0.1	0.1	0.1	0.1	
ACA	Basic accuracy, %				1.5	1.5	1.5	1.0	
	MAX. Resolution, μA				0.1	0.1	0.1	0.1	
	Frequency Response				50-500	50-500	50-500	50-500	
CX	Basic accuracy, %		4.0	5		3	3	2	0.5
	MAX. Resolution, pF			1		1	1	1	0.1
	MAX. Cap., μF		2K	32m		25	25	40	20m
LX	Basic accuracy, %			1.5	0.3	0.3	0.3	0.3	0.3
	MAX/Resolution, μH			100					
	Max. H			32	25	25	25	40	20
Ω	Basic accuracy, %	1.5	1.5	1.5	0.3	0.3	0.3	0.3	0.3
	Max. Resolution, mΩ	100	100	100	100	100	100	100	10
	Max. mΩ	2	2000	32	25	25	25	40	20
Hz	Basic accuracy, %		.5	1.5		0.05	0.05	0.05	0.1
	Max. Resolution, Hz		1.0			0.001	0.001	0.01	10
	Max Frequency, MHz		100K			5	5	700K	15
C°/F°	Basic accuracy, %		3						
	MAX. Resolution		1°C/°F						
	Range °F		-4~752						
	Range °C		-20~400						

Ordering Example: HHM16 DMM with type K beaded wire thermocouple, \$98.

**Accessories for Multimeters**

Model No.	Price	Description
HHM-TL	\$ 5	Extra General Test Lead Set
HHM18-TL	5	Extra Test Lead Set for HHM18
HHM-NIST	50	NIST Certificate
SC-GG-K-30-36	15	Extra type K beaded wire thermocouple
MN1604	3	Extra 9V alkaline battery





HHM22	HHM23	HHM19C	HHM19F	HHM24	HHM20	HHM21	HHM15	HHM14	HHM29	HHM16	HHM30
\$88	\$78	\$95	\$95	\$75	\$100	\$105	\$113	\$136	\$138	\$98	\$120
3200	1999	1999	1999	1999	4300	4300	3999	19999	4300	4300	1999
A	M	M	M	M	A	A	M	M	A	A	A
10	10	10	10	10	10	10	10	10	10	10	
.						.	.		.	.	
	.				.		.		.		
		°C	°F			°C/°F			°C/°F	°C/°F	
.	.	.	.	.	A-H	A-H			A-H	A-H	.
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0.25	0.35	0.35	0.35	0.35	0.25	0.25	0.5	.05	0.25	0.25	
100	100	100	100	100 mV	100	100	100	10	100	100	
1	1	1.5	1.5	1.5	0.75	0.75	1.5	1.0	0.75	0.75	
100	100	100	100	100	100	100	100	10	100	100	
50-400	50-500	50-500	50-500	50-500	50-2K	50-2K	50-500	20K	50-2K	50-2	
0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	0.5	2.0	0.5	
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	
1.5	1.2				1	1	2.0	2.5	2.5	1.0	
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.01	0.1	0.1	
50-400	50-500	50-500	50-500	50-500	50-1K	50-1K	50-500	50-500	50-500	50-1K	
3	2	2	2	2			5		5		2
10	10	10	10	10			10		1.0		0.1
32	20	20	20	20			400		43		2000
							5		5		3
							1		1		0.1
							40		43		200
0.3	0.4	0.4	0.4	0.4	0.3	0.3	1.0	0.2	0.3	0.3	0.3
100	100	100	100	100	100	100	100	1	100	100	10
32	20	20	20	20	43	43	4000	20	43	43	20
	0.1	0.1	0.1	0.1			0.5		1.0		
	10	10	10	10			1.0		0.1		
	15	15	15	15			1		430K		
		2	2			2			2	0.5	
		1°C	1°F			1°C/°F			1°C/°F	1°C/°F	
			-4~1400			-20~1370			-20~1370	-4~1562	
		-20~750				-4~2498			-4~2498	-20~850	



HHM14



HHM15

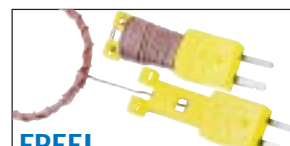


HHM29

For a selection of thermocouples see Section A.

**Ordering Example: HHM21 Auto-ranging DMM with type K thermocouple, \$105.**

All multimeters include **free** protective rubber boot with tilt stand, set of safety test leads, 9 V alkaline battery, type K beaded wire thermocouple (temperature models only) and complete operator's manual.



**FREE!**

All temperature models include a free 36" type K beaded wire thermocouple with subminiature connector and wire spool caddy (one per channel)

Order a Spare! Model No. SC-GG-K-30-36, \$15



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