

# HT9012 - HT9014

## PROFESSIONAL AMPEROMETRIC CLAMPS AC 600A IN CAT IV

The professional amperometric clamps HT9012 and HT9014 have been designed for measuring AC current up to 600A for reaching respectively CAT IV 600V and CAT III 1000V in compliance with standard IEC/EN61010-1. The clamps are provided with a wide display and with an auto power off function in order to preserve the internal battery. Model HT9014, in TRMS and provided with a 6000-dot display allows carrying out tests with an optimal resolution, taking advantage of a wide measuring range.

FUNCTIONS	HT9012	HT9014
Measurements in TRMS		•
DC/AC voltage	•	•
AC Current	•	•
Resistance / continuity test	•	•
Frequency		•
"Voltsense" sensor	•	•
Diode test	•	•
Temperature with K-type probe		•
Capacitance		•
Duty Cycle		•
Autorange		•
Data HOLD	•	•
MAX/MIN	(MAX only)	•
Peak current (<10ms)		•
Relative measurement		•
Bargraph		•
Backlight	•	•
AutoPowerOff	•	•

### GENERAL SPECIFICATIONS

Display:	LCD, 3 ½ digits, 2000 dots (HT9012) LCD, 4 digits, 6000 dots (HT9014)
Conversion type:	average value (HT9012) TRMS (HT9014)
Power supply:	1x9V battery type IEC F22
AutoPowerOff:	after 15 min of idleness
Clamp inner diameter:	30mm
Safety:	IEC/EN61010-1
Measurement category:	CAT IV 600V - CAT III 1000V
Insulation:	double insulation
Pollution degree:	2
Dimensions (LxWxH):	210x75x45mm
Weight (batteries included):	400g

### TECHNICAL SPECIFICATIONS

	HT9012	HT9014
<b>DC Voltage</b>		
Measurement range:	0.1mV ÷ 1000V	0.01mV ÷ 1000V
Basic accuracy:	±(1.0%rdg + 3dgt)	±(1.0%rdg + 3dgt)
<b>AC Voltage</b>		
Measurement range:	0.1mV ÷ 1000V	1mV ÷ 1000V
Bandwidth:	50 ÷ 60Hz	50 ÷ 400Hz
Basic accuracy:	±(1.0%rdg + 4dgt)	±(1.0%rdg + 10dgt)
<b>AC Current</b>		
Measurement range:	1mA ÷ 600A	0.01A ÷ 600A
Bandwidth:	50 ÷ 60Hz	50 ÷ 60Hz
Basic accuracy:	±(2.5%rdg + 4dgt)	±(2.8%rdg + 8dgt)
<b>Resistance and continuity test</b>		
Measurement range:	0.1Ω ÷ 20.00MΩ	0.1Ω ÷ 60.00MΩ
Basic accuracy:	±(1.0%rdg + 5dgt)	±(1.0%rdg + 5dgt)
Continuity buzzer:	<100Ω	<60Ω
<b>Capacitance</b>		
Measurement range:		0.01nF ÷ 4000μF
Basic accuracy:		±(2.5%rdg + 5dgt)
<b>Temperature with K-type probe</b>		
Measurement range:		-20°C ÷ 760°C; -4°F ÷ 1400°F
Basic accuracy:		±(2.0%rdg + 3°C); ±(2.0%rdg + 6°F)
<b>Frequency with clamp and probes</b>		
Measurement range:		0.01Hz ÷ 60.00kHz
Basic accuracy:		±(1.0%rdg + 5dgt)

**HT9014**  
HP009014



**HT9012**  
HP009012

### ACCESSORIES

#### Standard

- Pair of probes
- K-type wire probe + adapter (HT9014)
- Battery
- Transport bag
- User manual

#### Optional

- K-type thermocouples (HT9014 only)



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# HT9012

Rel. 1.02 of 12/07/10

AC clamp meter up to 600A

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## 1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as [% rdg + (number of dgt) x resolution]. It is referred to 25°C ± 5°C, &lt;80%RH

### DC Voltage (Autorange)

Range	Resolution	Accuracy	Input impedance	Overload protection
200.0mV	0.1mV	±(1.0%rdg + 3dgt)	10MΩ	1000VDC/ACrms
2.000V	0.001V			
20.00V	0.01V			
200.0V	0.1V			
1000V	1V			

### AC Voltage (Autorange)

Range	Resolution	Accuracy	Input impedance	Bandwidth	Overload protection
200.0mV	0.1mV	±(1.5%rdg + 15dgt)	10MΩ	50 ÷ 60Hz	1000VDC/ACrms
2.000V	0.001V	±(1.0%rdg + 4dgt)			
20.00V	0.01V				
200.0V	0.1V				
1000V	1V				

Integrated sensor for AC voltage detection: LED turn on for phase-earth voltage &gt; 100V, 50/60Hz

### AC Current

Range	Resolution	Accuracy	Bandwidth	Overload protection
2.000A	0.001A	±(2.5%rdg + 10dgt)	50 ÷ 60Hz	600Arms
20.00A	0.01A	±(2.5%rdg + 4dgt)		
200.0A	0.1A	±(3.0%rdg + 4dgt)		
600.0A	1A			

### Resistance and Continuity test (Autorange)

Range	Resolution	Accuracy	Buzzer	Overload protection
200.0Ω	0.1Ω	±(1.0%rdg + 5dgt)	≤100Ω	600VDC/ACrms
2.000kΩ	0.001kΩ			
20.00kΩ	0.01kΩ			
200.0kΩ	0.1kΩ			
2.000MΩ	0.001MΩ	±(2.0%rdg + 10dgt)		
20.00MΩ	0.01MΩ			

Test current of continuity test: &lt; 0.5mA

### Diode test

Feature	Test current	Open voltage
	0.3mA typical	1.5VDC



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## 2. GENERAL SPECIFICATIONS

### Mechanical characteristics

Size:	215(L) x 74(La) x 43(H)mm
Weight (including battery):	285g
Max conductor size:	30mm

### Supply

Battery type:	1 battery 9V NEDA 1604 IEC 6F22 JIS 006P.
Low battery indication:	“  ” is displayed when the battery level is too low.
Auto power OFF:	about 15 minutes of idleness

### Display

Characteristics:	3½ LCD (max 2000 counts), decimal point, unit symbol indication and backlight
Sample rate:	2 times/sec
Conversion mode:	mean value

### Climatic conditions

Reference temperature:	25°C ± 5°C
Operating temperature:	5 ÷ 40 °C
Operating humidity:	<80%RH
Storage temperature:	-20 ÷ 60 °C
Storage humidity:	<80%RH

### Reference standards

Comply with:	IEC/EN 61010-1
Insulation:	double insulation
Pollution:	Level 2
For inside use, max height:	2000m
Installation category:	CAT III 600V, CAT III 1000V to ground

**This product conforms to the prescriptions of the European directive on low voltage 2006/95/EEC and to EMC directive 2004/108/EEC**