

HT9022 AC/DC True RMS Clamp Meter 1000A - Cat IV

with Power Quality Analyser and Bluetooth to Android Devices
Three Year Warranty



FEATURES

- DC, AC + DC TRMS current up to 1000A
- DC, AC + DC TRMS voltage up to 1000V
- Resistance and continuity test
- Frequency with test leads
- Frequency with jaws
- Phase sequence / 1 wire phase correlation
- DC Power
- Active, Reactive, Apparent power on Single phase systems
- Active, Reactive energy on Single phase systems
- Power Factor on Single phase systems
- Harmonic voltage/current up to 25th with THD% calculation
- Inrush current
- Data logger with programmable IP
- Autoranging
- Backlight
- Auto Power OFF
- Data HOLD
- MAX/MIN/CREST
- PC connection via Bluetooth
- Connection with Android devices
- CAT IV 600V

STANDARD ACCESSORIES

- Test Leads
- * Alligator Clips
- Soft Carrying Case
- * TOPVIEWS : PC Windows software
- User Manual on CD-ROM
- Quick reference guide
- * Batteries



Simultaneously records

Power AC/DC - Voltage - Current Power Factor - Cosphi - Harmonics - THD%





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For all your Test Equipment Requirements

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1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as [% rdg + (number of dgt) x resolution]. It is referred to 23°C ± 5°C, <80%RH

| DC Voltage | | | | |
|--------------|------------|-------------------|-----------------|---------------------|
| Range | Resolution | Accuracy | Input impedance | Overload protection |
| 0.5 + 999.9V | 0.1V | ±(1.0%rdg + 4dgt) | 2.6ΜΩ | 1000VDC/ACrms |

| (AC+DC) TRMS Voltage | | | | | |
|----------------------|------------|-------------------|-----------------------|---------------------|--|
| Range | Resolution | Accuracy | | Overload protection | |
| 0.5 + 999.9V | 0.1V | 43 + 63Hz | 10 + 43Hz, 63 + 400Hz | 1000VDC/ACrms | |
| 0.5 + 999.9V | 0.17 | ±(1.0%rda + 3dat) | ±(3.5%rda + 3dat) | TOUTVECIACITIS | |

Input impedance: 2.6MΩ; Max. Crest factor: 1.41

| AC/DC Voltage – MAX/MIN/CREST | | | | | |
|-------------------------------|------------|-------------------|---------------|---------------------|--|
| Range | Resolution | Accuracy | Response time | Overload protection | |
| 0.5 + 999.9V | 0.1V | ±(3.5%rdg + 5dgt) | 1s | 1000VDC/ACrms | |

Input impedance: 2.6MΩ; Max. Crest factor: 1.41

| DC Current | | | |
|--------------|------------|-------------------|---------------------|
| Range | Resolution | Accuracy | Overload protection |
| 0.5 + 999.9A | 0.1A | ±(2.0%rdg + 5dgt) | 2000ADC/ACrms |

| AC (AC+DC) | AC (AC+DC) TRMS Current | | | | | |
|--------------|-------------------------|-------------------|-----------------------|---------------------|--|--|
| Range | Resolution | Accuracy | | Overload protection | | |
| 0.5 + 999.9A | 0.1A | 43 + 63Hz | 10 + 43Hz, 63 + 400Hz | 2000VDC/ACrms | | |
| U.5 + 999.9A | U.IA | ±(2.0%rdg + 4dgt) | ±(3.5%rdg + 5dgt) | 2000VDC/ACIIIIS | | |

Max. Crest factor: 3

| AC/DC | AC/DC Current – MAX/MIN/CREST | | | | | |
|----------|-------------------------------|------------|------------------------|---------------|---------------------|--|
| Ran | ge | Resolution | Accuracy | Response time | Overload protection | |
| 0.5 + 99 | 99.9A | 0.1A | \pm (3.5%rdg + 5dgt) | 1s | 1000VDC/ACrms | |

Max. Crest factor: 3

| Resistance and Continuity test | | | | | |
|--------------------------------|------------|-------------------|-----------------------|---------------------|--|
| Range | Resolution | Accuracy | Buzzer | Overload protection | |
| $0.0\Omega + 59.9k\Omega$ | 0.1Ω | ±(1.0%rdg + 5dgt) | $1\Omega + 150\Omega$ | 1000VDC/ACrms x 60s | |

| Frequency with test leads and jaws | | | | | |
|------------------------------------|------------|---------------------|---------------------|--|--|
| Range | Resolution | Accuracy | Overload protection | | |
| 10.0 + 99.9Hz | 0.1Hz | +/1 09/ rda + Edat\ | 1000VDC/ACrms | | |
| 100 ÷ 400Hz | 1Hz | ±(1.0%rdg + 5dgt) | 2000ADC/ACrms | | |

Voltage range for frequency measurement with test leads: 0.5 + 1000V / Current range for frequency measurement with javs: 0.5 + 1000A

| DC Power | | |
|---------------|-----------------|---------------------|
| Range [kW] | Resolution [kW] | Accuracy |
| 0.00 ÷ 99.99 | 0.01 | 1/2 00/ rdc + 2dct) |
| 100.0 ÷ 999.9 | 0.1 | ±(3.0%rdg + 3dgt) |

Accuracy defined for: Voltage > 10V, Current ≥ 2A

| Active, Reactive, Apparent Power | | | | |
|----------------------------------|----------------------------|------------------------|--|--|
| Range [kW, kVAR, KVA] | Resolution [kW, kVAR, kVA] | Accuracy | | |
| 0.00 + 99.99 | 0.01 | ±(2.0%rdg + 3dgt) (*) | | |
| 100.0 ÷ 999.9 | 0.1 | ±(3.0%rdg + 3dgt) (**) | | |

(*) Accuracy defined for: sinusoidal waveform 10..65Hz, Voltage > 10V, Current ≥ 2A, Pf: 0.5

(**)Accuracy defined for: sinusoidal waveform >65Hz, Voltage > 10V, Current ≥ 5A, Pf: 0.5



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| Active, Reactive Energy | | |
|-------------------------|-------------------------|------------------------|
| Range [kWh, kVARh] | Resolution [kWh, kVARh] | Accuracy |
| $0.00 \div 99.99$ | 0.01 | ±(2.0%rdg + 3dgt) (*) |
| 100.0 ÷ 999.9 | 0.1 | ±(3.0%rdg + 3dgt) (**) |

^(*) Accuracy defined for: sinusoidal waveform 10..65Hz, Voltage > 10V, Current ≥ 2A, Pf: 0.5
(**) Accuracy defined for: sinusoidal waveform >65Hz, Voltage > 10V, Current ≥ 5A, Pf: 0.5

| Power Factor | | |
|--------------|------------|----------|
| Range | Resolution | Accuracy |
| 0.20 + 1.00 | 0.01 | ±3* |

Accuracy defined for: sinusoidal waveform 10..65Hz, Voltage > 10V, Current ≥ 2A, Pf: 0.5 Accuracy defined for: sinusoidal waveform >65Hz, Voltage > 10V, Current ≥ 5A, Pf: 0.5

| oltage / Current Harmonics | | | |
|----------------------------|---------------------|---------------------|---------------------|
| Harmonic order | Fund. Frequency[Hz] | Resolution [V], [A] | Accuracy |
| 1 + 25 | 10 ÷ 75 | 0.1 | I/E 00/ ada + Edat) |
| 1 + 8 | 76 ÷ 400 | U. I | ±(5.0%rdg + 5dgt) |

| Phase sequence indication and phase conformity with 1-wire (*) | | |
|--|-----------------|-----------------|
| Voltage range | Frequency range | Input impedance |
| 100 + 1000V | 40 + 70Hz | 1.3ΜΩ |

^(*) On standard conditions: instrument correctly gripped, standard shoes, standard floor, etc

2. GENERAL SPECIFICATIONS

Internal memory and recording parameters conditions

Number of saved parameters: 60 parameters

Integration period (IP): 1, 5, 10, 30, 60, 120, 300, 600 or 900s programmable Inrush current acquiring threshold: programmable between 5A and 900A in steps of 1A

Inrush current detection modes: Fix. Variable

Inrush current sample window acquiring: 1/1 (acquiring samples each half period)

1/2 (acquiring samples one half period every two)1/4 (acquiring samples one half period every four)

Max number of saved events: 10
Max number of saved recordings: 20
Memory capacity: 2Mbytes

Recording autonomy: approx. 2.1 days (@ 60 parameters & IP = 900s)

Interface to PC: Bluetooth protocol

Radio module characteristics

Radio: Bluetooth ™ 2.00

Frequency: 2.4 GHz (2400-2483.5MHz)

Power: Class 2 Baud rate: 57600 baud

Mechanical characteristics

Size: 252(L) x 88(La) x 44(H)mm

Weight (including battery): 420g Max conductor size: 45mm

Supply

Battery type: 2 batteries 1.5V type AAA IEC LR03

Battery life: approx. 53 hours of continuous use in power/energy measures

Auto Power Off: approx. 5 minutes of idleness

Display

Characteristics: graphic dot matrix, 128x128pxl with backlight

Sample rate: 128 samples/period (@ 50Hz)

Display update rate: 1 times/sec Conversion mode: TRMS



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