

# PROFESSIONAL HIGH PERFORMANCE TRMS CLAMP-ON METER Models F01, F03, F05, F07 & F09



- ▶ Hand-held size, ultra practical and ergonomic
- ▶ True RMS measurement through fast sampling – accurate on non-linear waveforms
- ▶ Measure V, A, Ohms, kW, Hz, Phase Rotation, Temperature, AC + DC (model dependent)
- ▶ Temperature measurement up to 1832°F (1000°C) via standard K thermocouple
- ▶ Selectable V-Live™ function (buzzer) warns of live circuit
- ▶ Automatic DC current zeroing
- ▶ EN 61010-1, EN 61010-2-032, 600V Cat. III



*Model F05 monitoring volts, amps and watts on a control panel.*

The F01 – F09 series of clamp-on meters is a high performance line of clamp-on meters built into a rugged compact sized case, with exceptional ergonomic design and extraordinary measurement possibilities. These are definitely not your generic off-the-shelf clamp-on! They are designed to offer professional measurement possibilities rarely seen in a clamp-on meter.

Integrating a fast microprocessor sampling at a high rate, they are completely automatic and perform TRMS measurements on the most distorted waveforms. The Models F01 through F09 offer extraordinary measurement capabilities to the professional engineers and electricians who rely on professional measurement products.

Here are some interesting facts:

- All models automatically detect AC or DC in Voltage and Current – Just select the function.
- All models have a V-Live™ function to warn of the use of live circuits or elevated voltages. They also auto-range for the best resolution on a backlit 4000-count display and have Auto-Off to save the battery.
- Models F07 and F09 measures TRMS Voltage and Current and can incorporate the DC component of the signal for the Truest RMS.
- Models F07, F05 and F09 measure in-rush currents from one cycle up to 10 cycles and frequency
- Models F05 and F09 measures Phase Rotation (using only two leads!), Power Factor and Power.
- Model F01 does not have a magnetic core in its jaws.
- All models are very ergonomic and can be operated with one hand.
- Other features, based on the model, include Temperature, Min/Max/Peak, AC/DC adaptor input enabling the use of accessories (large clamps, light sensors...)

The Models F01 – F09 are designed for the industrial environment and offer enhanced safety specifications. They conform to the demanding international safety standards with a 600V Cat. III rating and are CE marked.

## FEATURES

- ▶ Hand-held size, ultra practical and ergonomic design
- ▶ True RMS measurement through fast sampling – accurate on non-linear waveforms
- ▶ 4kHz Bandwidth
- ▶ 3.5 Crest Factor @ 600Arms and 900Vrms
- ▶ Peak function captures 500µs signals
- ▶ Min/Max for automatic capture of extreme values on 100ms samples
- ▶ Temperature measurement up to 1832°F (1000°C) via standard K thermocouple
- ▶ Continuity at programmable buzzer threshold from 1 to 40Ω
- ▶ Selectable V-Live™ function (buzzer) warns of live circuit
- ▶ Battery life displays directly in hours at the push of a button
- ▶ Automatically detects AC or DC and is auto-ranging
- ▶ Automatic DC current zeroing
- ▶ Backlit digital display
- ▶ EN 61010-1, EN 61010-2-032, 600V Cat. III
- ▶ Includes soft carrying case and test leads

## APPLICATIONS

- ▶ Electrical maintenance
- ▶ Electrical power distribution
- ▶ Safety lighting system maintenance
- ▶ Automotive test troubleshooting
- ▶ Industrial maintenance
- ▶ HVAC
- ▶ Phase identification

# SPECIFICATIONS

MODELS	F01	F03	F05	F07	F09
<b>ELECTRICAL</b>					
AC Current (Auto-Ranging)	0.2 to 400Arms	0.2 to 400Arms	0.2 to 400Arms	0.2 to 400Arms	0.2 to 400Arms
AC Voltage (Auto-Ranging)	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms
DC Current (Auto-Ranging)	–	0.2 to 400Arms	0.2 to 400Arms	0.2 to 400Arms	0.2 to 400Arms
DC Voltage (Auto-Ranging)	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms	0.2 to 600Vrms
AC + DC Current (Auto-Ranging)	–	–	–	0.2 to 400Arms	0.2 to 400Arms
AC + DC Voltage (Auto-Ranging)	–	–	–	600Vrms	600Vrms
Resistance	400Ω	4000Ω	40kΩ	40kΩ	40kΩ
Diode Test	–	Yes	Yes	Yes	Yes
Continuity (Beeper)	Yes	Yes	Yes (w/adjustable threshold)	Yes (w/adjustable threshold)	Yes (w/adjustable threshold)
Frequency	–	–	20kHz	20kHz	20kHz
Power	–	–	240kW	–	5W to 240kW (kW, kVA, kVAR)
Power Factor	–	–	-1.00 to 1.00	–	-1.00 to 1.00
Phase Rotation	–	–	Yes	–	Yes
Min/Max/Peak	–	Yes	Yes	Yes	Yes
Hold	Yes	Yes	Yes	Yes	Yes
Inrush Current	–	–	0.5 to 10 cycles selectable	0.5 to 10 cycles selectable	0.5 to 10 cycles selectable
V-Live™ Hazardous Voltage Indicators <sup>(1)</sup>	45Vp	45Vp	45Vp	45Vp	45Vp
Auto-Off	Yes	Yes	Yes	Yes	Yes
Power Source	9V Alkaline battery	9V Alkaline battery	9V Alkaline battery	9V Alkaline battery	9V Alkaline battery
Battery Indicator <sup>(2)</sup>	Yes	Yes	Yes	Yes	Yes
Buzzer for Overrange	Yes	Yes	Yes	Yes	Yes
<b>MECHANICAL</b>					
Adapter (AC/DC)	–	–	–	0 to 4000mV	–
Dimensions	2.76 x 7.6 x 1.46" (70 x 193 x 37mm)	2.76 x 7.6 x 1.46" (70 x 193 x 37mm)	2.76 x 7.6 x 1.46" (70 x 193 x 37mm)	2.76 x 7.6 x 1.46" (70 x 193 x 37mm)	2.76 x 7.6 x 1.46" (70 x 193 x 37mm)
Weight	9.17 oz (260g)	9.17 oz (260g)	9.17 oz (260g)	9.17 oz (260g)	9.17 oz (260g)
<b>DISPLAY</b>					
Backlight	–	Yes	Yes	Yes	Yes
<b>ENVIRONMENTAL</b>					
Temperature (int or ext)	–	-50° to +1832°F (-10° to 1000°C)	–	-50° to +1832°F (-10° to 1000°C)	–
<b>SAFETY</b>					
Safety Rating	EN 61010-1, EN 61010-2-032, 600V Cat. III				
Double Insulation <input type="checkbox"/>	Yes				
CE Mark	Yes				

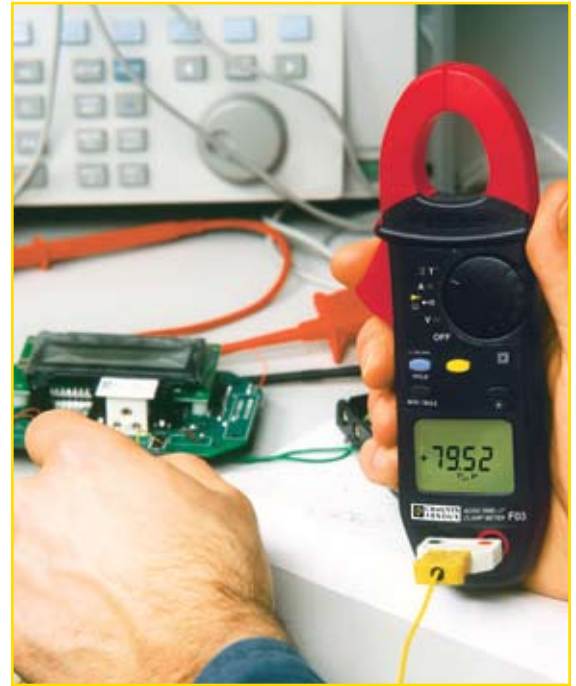
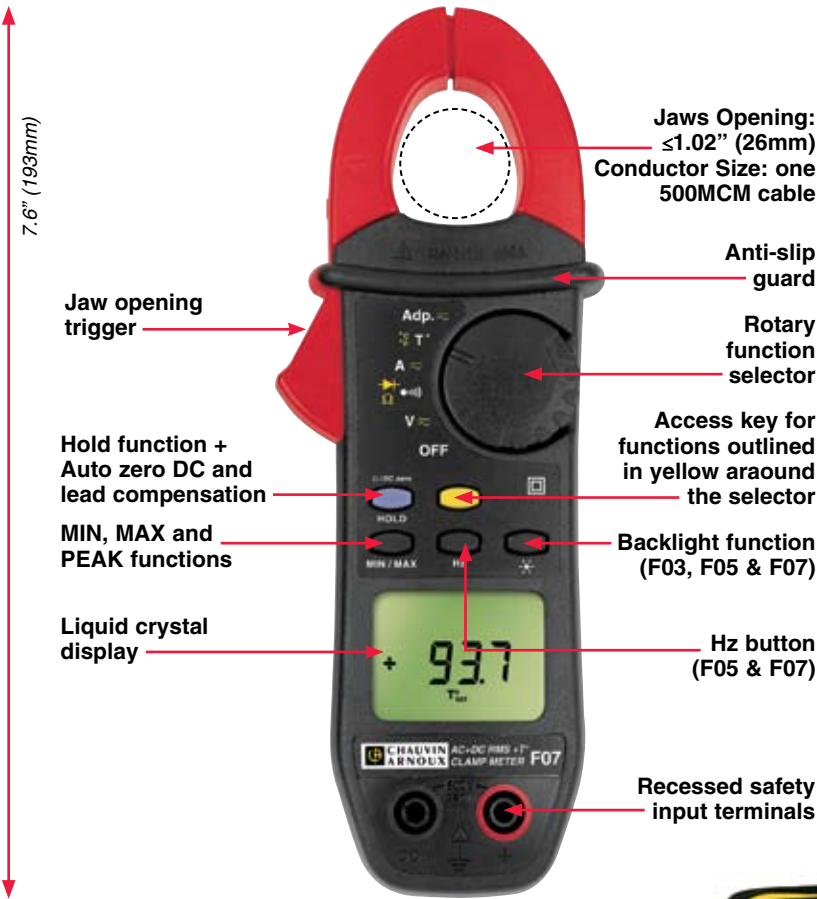
<sup>(1)</sup>Indicates voltage higher than instrument rating

<sup>(2)</sup>Remaining time expressed in hours on Models F03, F05 and F07





# CONSTRUCTION



Model F03 measuring temperature on electronic circuit board using a K thermocouple.



All models include test leads, a soft carrying case and user manual.

## ORDERING INFORMATION

## CATALOG NO.

TRMS Clamp-On Meter Model F01 (TRMS, 400Aac, Ohms, Continuity) . . . . .	Cat. #2129.51
TRMS Clamp-On Meter Model F03 (TRMS, 400Aac/dc, 600ac/dc, Ohms, Continuity, Temperature) . . . . .	Cat. #2129.52
TRMS Clamp-On Meter Model F05 (TRMS, 400Aac/dc, 600ac/dc, Hz, Power (kW), Phase Rotation, Ohms, Continuity) . . . . .	Cat. #2129.53
TRMS Clamp-On Meter Model F07 (TRMS, 400Aac/dc, 600ac/dc, Hz, Ohms, Continuity, Temperature) . . . . .	Cat. #2129.54
TRMS Clamp-On Meter Model F09 (TRMS, 400Aac/dc, 600ac/dc, Hz, Power (kW, kVA, kVAR), Phase Rotation, Ohms, Continuity) . . . . .	Cat. #2129.50



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