



# MT784 Thermal Clamp Meter *TRUERMS*

The MT784 is a CAT IV 600V True RMS 1000AAC/DC digital clamp meter incorporating an 80 x 80 pixel Thermal Imager with a range from -20°C to 260°C. This clamp meter has a large 6000 count colour TFT LCD display that provides fast sampling times and high accuracy measurements. The meter has been designed to measure 1500V DC purposely for the Solar industry, 1000V AC, K-Type temperature, frequency, capacitance, AC+DC Voltage and resistance measurements, plus the Low Z range function has a low pass filter to eliminate errors caused by "Ghost" voltages. The 100ms Inrush current detects starting up currents of electric motors, input surge current, or switch-on surge currents, this is the maximum instantaneous input current drawn by an electrical device when first turned on. The meter has a built-in record and store function and displays trend capture, using the Bluetooth function the meter wirelessly transmits data to the Android or iOS mobile App allowing the user to view, save, organise and share recordings. Added features is Non-Contact voltage detection, Peak Hold, Min/Max and Average, Data hold function and a built-in flashlight for dimly lit areas. The double injection moulded housing is IP65 waterproof.

## Features

- 6000 count 2.4" TFT Colour LCD display
- Ø37mm Cable Clamp size
- Measurement of DC voltage to 1500V and AC voltage up to 1000V
- AC+DC TRMS Voltage
- INRUSH Current Measurements
- Capacitance to 100mF
- K-type Temperature measurement from -40°C to 1000°C
- Thermal Temperature -20°C to 260°C
- 80 x 80 pixel Thermal Imager Resolution
- Image Frequency to 50Hz
- Logging function with Trend Capture
- NCV – Non-Contact Voltage Detector
- Built-In Flashlight
- Continuity buzzer and Diode Test
- Max, Min and Average with Time Stamp
- Auto Power Off
- Optional MT740 Flexible Coil Clamp for measurement to 3000A AC

Function	Range	Accuracy
<b>Imaging and Optical Data</b>		
Field of View	21° x 21° / 0.5m	
Spatial Resolution	4.53mrad	
Thermal sensitivity	<0.1°C at 30°C / 100mK	
Image Frequency	50Hz	
IR Resolution	80 x 80 Pixels	
<b>Imaging Presentation</b>		
Display	2.4" TFT Colour LCD, 240 x 320 pixels	
<b>Measurements</b>		
Thermal Temperature Range	-20°C to 260°C	±(3.0% +3°C)
<b>Measurement Analysis</b>		
Spot	Center Spot	
Automatic Detection	Hot Point or Cold Point	
Emissivity Correction	Variable 0,01 to 0,99 in 0,01 steps	
Colour Palette	Iron / Rainbow / Grey / Grey Inverted / Feather	
Focus Mode	Focus Free	
Focal Length	7.5mm	
Spectral range	8 - 14µm	
Data Communication Interface	Bluetooth BLE	
<b>Clamp Meter</b>		
Jaw Size	37mm	
DC Current	60.00A – 1000A	±(2.0% +8)
AC Current	60.00A – 1000A	±(2.5% +5)
Flexible Coil Current (Optional)	30.00A – 3000A	±(3.0% +5)
DC Voltage	600.0mV – 1500V	±(0.5% +5)
AC Voltage	6.000V – 1000V	±(1.2% +5)
LowZ AC Voltage	6.000V – 300V	±(3.0% +40)
AC+DC TRMS Voltage	6.000V – 1000V	±(2.5% +20)
LowZ AC+DC Voltage	6.000V – 300V	±(3.5% +40)
Resistance	600.0Ω – 60MΩ	±(0.8% +5)
Frequency	60.00Hz – 10.00kHz	±(0.2% +5)
Capacitance	60.00nF – 100.0mF	±(3.0% +8)
K-Type Temperature	-40°C to 1000°C	±(1.5% +3°C)
Duty Cycle	10.0% to 90%	±(1.2% +8)
Size	270 x 95 x 42mm	
Weight	550g	



## MT784 | 1500V DC Thermal Clamp Meter

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