

# Extech 400 Series MultiMeters

**Rugged design with built-in IR Thermometer**

Extech 400 Series MultiMeters are available with or without the built-in InfraRed thermometer, select auto or manual ranging, True RMS or averaging, and choose the meter you want at a price you can afford.

**BUILT IN IR**  
**Thermometer**   
Patented



## Common Features:

- Large backlit LCD display with easy-to-read 1" digits
- Type K thermometer built-in for temperature measurements
- Low current capability: measure down to 0.1µA
- Input fuse protection and mis-connection warnings
- Complete with CAT III test leads, multi-position tilt stand and velcro strap for hanging, protective holster with test lead holder, bead wire temperature probe, and 9V battery

## Model EX410/EX411

- True RMS (EX411)
- Manual Ranging

## Model EX420/EX430

- True RMS (EX430)
- Autoranging
- Capacitance
- Frequency
- Relative function

## Model EX450

- Built-in IR Thermometer
- Autoranging

## Model EX470

- Built-in IR Thermometer
- True RMS
- Autoranging
- Capacitance
- Frequency
- Relative function



**Built-In IR Thermometer**  
EX450 and EX470 models offer built-in InfraRed Thermometer

EX400  
SERIES



| Specifications          | EX410                       | EX411                       | EX420                       | EX430                       | EX450                         | EX470                         |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------|
| <b>Temperature (IR)</b> | —                           | —                           | —                           | —                           | ✓ -58 to 518°F (-50 to 270°C) | ✓ -58 to 518°F (-50 to 270°C) |
| Averaging/True RMS      | Averaging                   | ✓ True RMS                  | Averaging                   | ✓ True RMS                  | Averaging                     | ✓ True RMS                    |
| Basic Accuracy (VDC)    | ±0.5%                       | ±0.3%                       | ±0.3%                       | ±0.3%                       | ±0.5%                         | ±0.3%                         |
| AC Voltage              | 1mV to 750V                 | 1mV to 750V                 | 0.1mV to 750V               | 0.1mV to 750V               | 1mV to 750V                   | 0.1mV to 750V                 |
| DC Voltage              | 0.1mV to 1000V              | 0.1mV to 1000V              | 0.1mV to 1000V              | 0.1mV to 1000V              | 0.1mV to 1000V                | 0.1mV to 1000V                |
| AC Current              | 0.1mA to 20A                | 0.1mA to 20A                | 0.1µA to 20A                | 0.1µA to 20A                | 0.1µA to 20A                  | 0.1µA to 20A                  |
| DC Current              | 0.1µA to 20A                | 0.1µA to 20A                | 0.1µA to 20A                | 0.1µA to 20A                | 0.1µA to 20A                  | 0.1µA to 20A                  |
| Resistance              | 0.1Ω to 20MΩ                | 0.1Ω to 20MΩ                | 0.1Ω to 40MΩ                | 0.1Ω to 40MΩ                | 0.1Ω to 20MΩ                  | 0.1Ω to 40MΩ                  |
| Capacitance             | —                           | —                           | ✓ 0.01nF to 100µF           | ✓ 0.01nF to 100µF           | —                             | ✓ 0.01nF to 100µF             |
| Frequency               | —                           | —                           | ✓ 0.001Hz to 10MHz          | ✓ 0.001Hz to 10MHz          | —                             | ✓ 0.001Hz to 10MHz            |
| Temperature (Type K)    | -4 to 1382°F (-20 to 750°C) | -4 to 1382°F (-20 to 750°C) | -4 to 1382°F (-20 to 750°C) | -4 to 1382°F (-20 to 750°C) | —                             | -4 to 1382°F (-20 to 750°C)   |
| Duty Cycle              | —                           | —                           | ✓ 0.1% to 99.9%             | ✓ 0.1% to 99.9%             | —                             | 0.1% to 99.9%                 |
| Continuity / Diode      | Yes                         | Yes                         | Yes                         | Yes                         | Yes                           | Yes                           |
| Dimensions              | 7.4x3.2x2" (187x81x50mm)    | 7.4x3.2x2" (187x81x50mm)    | 7.4x3.2x2" (187x81x50mm)    | 7.4x3.2x2" (187x81x50mm)    | 7.4x3.2x2" (187x81x50mm)      | 7.4x3.2x2" (187x81x50mm)      |
| Weight                  | 0.75lbs (342g)              | 0.75lbs (342g)              | 0.75lbs (342g)              | 0.75lbs (342g)              | 0.75lbs (342g)                | 0.75lbs (342g)                |
| Warranty                | 1 year                      | 1 year                      | 1 year                      | ✓ 3 years                   | ✓ 3 years                     | ✓ 3 years                     |

## Ordering Information

EX410 .....Manual Ranging MultiMeter  
 EX410-NIST .....EX410 MultiMeter w/ Calibration Traceable to NIST.  
 EX411 .....True RMS Manual Ranging MultiMeter  
 EX411-NIST .....EX411 MultiMeter w/ Calibration Traceable to NIST.  
 EX420 .....Autoranging MultiMeter  
 EX420-NIST .....EX420 MultiMeter w/ Calibration Traceable to NIST.  
 EX430 .....True RMS Autoranging MultiMeter  
 EX430-NIST .....EX430 MultiMeter w/ Calibration Traceable to NIST.  
 EX470 .....True RMS Autoranging MultiMeter + IR Thermometer  
 EX470-NIST\* .....True RMS Autoranging MultiMeter + IR Thermometer w/NIST

## Accessories

CA500 .....Case with shoulder strap and side pockets  
 TP873 .....Replacement Bead wire Temperature Probe  
 HG500 .....Magnetic Hanging Strap

\*NIST-Limited NIST for Certificate of Traceability to all functions except IR Thermometer



www.cmv-steck.de

Specifications subject to change without notice.  
 Copyright © 2008-2012 Extech Instruments Corporation. All rights reserved including the right of reproduction in whole or in part in any form. 1/16/12 - R1

**CMV Steck GmbH**

Rheinstraße 92  
 D-76870 Kandel

Mail: info@cmv-steck.de  
 www.cmv-steck.de

Tel: + 49 (0) 7275 988 684 – 0  
 Fax: + 49 (0) 7275 988 684 – 9