

# Individual Harmonics THD%, DF%, and Volts/Amps Readings! Dual-display Convenience!

Added DC Component Hdc Harmonics in AC+DC Mode!  
3-Phase Power both Balanced and Unbalanced Loads!

# BM099

AC+DC TRMS  
Harmonic PowerClamp™



www.brymen.com



Bright People's Choice

CE

UK  
CA

UL US



BM099

## FUNCTIONS & FEATURES

- 3-5/6 digits 6000 counts / 4 digits 9999 counts + 999 counts Dual Display
- LARGE 51mm AmpTip® jaws for both large and slim conductors
- 1000A AC/DC Power Quality Clamp-on with Multimeter functions
- CAT III 1kV and CAT IV 600V AC/DC for utility applications
- AC and AC+DC True RMS on Voltage, Current, Harmonics, and Power functions
- Power readings of W (real power), VA (apparent power), and VAR (reactive power)
- Dual Display Volt/Amp+THD%, Volt/Amp+DF%, ~VA/W/VAR+PF, and AC+DC\_VA+DCA
- Unbalanced-Load 3-Phase Power Readings; Selectable 3-wire and 4-wire calculations
- Direct Single-Phase Power, 3-Phase Balanced-Load Power, and AC+DC Apparent Power
- H02 to H25 Individual Harmonics Volt/Amp, THD%, and DF% Readings in V/A AC mode
- Added Hdc DC component to Harmonics Readings in V/A AC+DC mode
- THD% (Total Harmonic Distortion) of V/A functions from 2% to 600%
- DF% (Total Distortion Factor) of V/A functions from 2% to 100.0%
- ACV (with Low Pass Filter) and DCV; @ 60.00V and 999.9V ranges
- AC+DCV; @ 999.9V range; Bandwidth up to 3kHz
- Regular ACA, AC+DCA, and DCA; @ 999.9A range
- AmpTip® Low-Current ACA, AC+DCA, and DCA; @ 40.00A range
- Clamp-jaw ACA-Hz and Test-lead Line Level ACV-Hz from 40.00Hz to 70.00Hz
- Fast BeepLit™ Continuity; Beep sound with backlight effect for noisy environments
- Type-K temperature from -40.0 °C to 400.0 °C or -40.0 °F to 752.0 °F selectable
- Cx from 10.0μF to 999.9μF for start & run motor capacitors
- Diode test
- Non-Contact EF-Detection (NCV)
- Probe-Contact EF-Detection for more precise indication of live
- Ohms; @ 600.0Ω and 6.000kΩ ranges
- Auto-Power-Off (APO)
- Relative-Zero mode and DC-Zero mode
- HOLD feature freezes the display reading for later viewing.
- REC MAX/MIN to compare and record extreme display readings
- Backlighted LCD display plus Working Flashlight
- Soft carrying pouch
- UL, UKCA, and CE compliance
- Transient protection 8kV 1.2/50μs lightning surge
- 1kV AC/DC general input protection on all functions
- Rugged fire retarded housing with battery access door

# AmpTip® Jaws PowerClamp™ + 25<sup>th</sup> Harmonics! 1000A with AC+DC TRMS for CAT-III 1kV!

BeepLit™ Continuity, °C/°F, Cx, EF-Detection NCV, Clamp-on Hz,  
MinMax Record, Hold, and Relative Features!

## Direct Use on Lives

Apply to and Removal from Hazardous Live Uninsulated Conductors Permitted

## Large 51mm AmpTip® Jaws

Easy Measure on Both Large and Slim Conductors

## Type-K Temperature

Measures from -40.0 °C to 400.0 °C or -40.0 °F to 752.0 °F, Selectable

## Capacitance

Measures Start & Run Motor Capacitors from 10.0µF to 999.9µF

## Resistance

2 Ranges @ 600.0Ω and 6.000kΩ

## Fast BeepLit™ Continuity

Quick Open-short Tests with Backlight Effects on Switches, Fuses, and Wires

## High Accuracy 0.5% DCV

2 Ranges @ 60.00V and 999.9V

## Direct LPF ACV

For Noisy Electrical and VFD Signals; 2 Ranges @ 60.00V and 999.9V

## Diode Test

Quick Checks on Diodes and Rectifiers

## High Bandwidth AC+DCV

Range @ 999.9V; Bandwidth up to 3kHz

## AmpTip® Current

Measures at Jaw Tip for Small-sized Thin Conductors up to 40.00A

## Regular Current

Measures at Jaws Center for Regular Conductors up to 999.9A

## Clamp-on Hz

Measures Non-Invasive Current Frequency Via Clamp Jaws; 40Hz to 70Hz

## AC Line-Level Hz

Measures Noisy High Voltage Frequency via Test leads; 40Hz to 70Hz

## EF-Detection

Both Non-Contact (NCV) & Single-Probe Voltage Detection for Identifying Live Lines

## Convenient Dual Display

Volt/Amp+THD%, Volt/Amp+DF%, (AC)VA/W/VAR+PF, and (AC+DC)VA+DCA

## REC MAX/MIN

Compares and Records Extreme Display Readings

## THD% of Volt/Amp Functions

Harmonic Distortion of Total or Individual Harmonics up to the 25<sup>th</sup>

## DF% of Volt/Amp Functions

Distortion Factor of Total or Individual Harmonics up to the 25<sup>th</sup>

## LVD with UL Listed

Power analysis Applications for CAT III 1kV & CAT IV 600V Areas



## AC+DC Power VA

Measures Power VA in AC+DC mode with Dual Display DCA

## Single-phase & 3-phase Balanced-load Power

Measures AC Power W, VA, and VAR with Dual Display PF

## Relative Zero Mode

Convenient Readings Comparison & Offset

## DC-Zero Mode

Offsets DCA residuals from magnetic hysteresis of the jaws

## 3-phase Unbalanced-load Power

Measures and Calculates 3-wire/ 4-wire system Power W cost-effectively

## AC, AC+DC TRMS

Ideal for Non-sinusoidal Waveforms on Voltage, Current, Harmonics, and Power

## Rugged & Durable

Robust Fire-retarded Housing with Battery Access Door

## Ergonomic & Streamlined Body

Fits Nicely in A Hand with Single-Handed Rotary Switch Operation

## Data HOLD

Freezes the Displaying Reading for Later Viewing

## Fully Auto-ranging

Shortens the Time to Measure and Increases the Ease of Use

## Auto Power Off

Turns Off Automatically to Extend Battery Life

## Transient Protection

8kV 1.2/50µS Lightning or Switching Surge Protection for Serious Users

## 1kV Input Protection

Superb Protection for Misinput on All Functions and Ranges

## Back-lighted LCD plus Working Flashlight

Easy Viewing in the Dark

## EMC EN61326-1 Compliance

Superior Immunity to Interferences with Reliable Operations and Readings

