

60,000 Counts, 100kHz TRMS and CAT-III 1kV Now Over-molded Ergonomic!

AutoHold Real-Read™, BeepLit™ Continuity, BeepLit™ Diode Alert, LoZ AutoV
Hi-Lo EF Detection, VFD V & Hz, nS Measurements, T1-T2 Type-K, dBm
Crest Peaks, Speedy MaxMinAvg, Relative Zero, BeepJack™

BM780 SERIES

Professional
Multimeters



www.brymen.com



Bright People's Choice





BM789



BM785

789	785	FUNCTIONS & FEATURES
•	7kHz	ACV Bandwidth up to 100kHz
•		dBm Readings with Selectable Reference Impedance Values
•		AutoV LoZ Ghost-Voltage-Buster Feature; Automatic Selection of ACV and DCV
•		T1-T2 Dual Input Type-K Temperature -200.0°C to 1090°C; Selectable °F Readings
•		%4~20mA Readings to Test Process Control Loop Currents
•		nS Range 99.99nS to Extend Resistance Measurements
•	•	4-5/6 Digits 60,000 Counts Max Large Easy-to-Read LCD Display
•	•	Nominal 5/Sec Fast Measurements; Fully Auto-Ranging
•	•	31 Segment Analog Bar-graph Updates 50/Sec
•	•	Best Basic DCV Accuracy up to 0.03%+2d
•	•	Warm White Back-Lighted LCD Display
•	•	DC+AC, AC True RMS Conversion
•	•	Intelligent Auto Power Off
•	•	Data Hold
•	•	Relative Zero Mode
•	•	Crest (Peak Hold) Captures MaxMin Changes > 0.25ms in Durations
•	•	AutoHold Real-Read™ Shows Real-time Readings to Avoid Blind Measurements
•	•	Speedy Record MaxMinAvg Readings; Updates 10/sec Nominal on DC Measurements
•	•	VFD-V & VFD-Hz Measures Fundamental V & Hz of Most Variable Frequency Drives
•	•	DC, AC, DC+AC Voltage Ranges 600.00mV to 1000.0V
•	•	DC, AC, DC+AC μ A, mA & A Ranges 600.00 μ A to 10.000A
•	•	Ohms Ranges 600.00 Ω to 60.000M Ω
•	•	Capacitance Ranges 10.00nF to 10.00mF
•	•	Line Frequency Ranges 99.999Hz to 50.000kHz
•	•	Logic Frequency Ranges 99.999Hz to 1.0000MHz
•	•	BeepLit™ Continuity Tester. Features Audible Beep & Visible Backlight Effects
•	•	BeepLit™ Diode Tester. Short-Beep-Alert and Voltage-threshold Continuity
•	•	BeepJack™ Input Warning Against Improper Plug into μ AmA/A Terminals
•	•	Rugged Fire Retarded Casing with Battery Compartment Cartridge
•	•	Over-molded Protective Holster with Probe-Holders & Tilt-Stand
•	•	Optional Purchase Magnetic Hanger Strap
•	•	HBC 1kV Fuses Protected on μ AmA/A Terminals
•	•	Transient Protection up to 8kV 1.2/50 μ s Lightning Surge
•	•	SAFETY Meets EN/BSEN 61010-1/-2-030/-2-033 to Measurement CAT III 1000V & CAT IV 600V
•	•	EMC Meets EN/BSEN 61326-1:2013

Ergonomic and Handy + Professional Performance

Superb Resolution, Accuracy, Speed, Bandwidth, Safety, & Quality!

DC+AC & AC 100kHz TRUE RMS

For Non-sinusoidal & Complex Waveforms of Volts & Amps.
100kHz High Bandwidth for ACV

LINE LEVEL Hz

Measures Noisy Line Level Voltage Frequencies

INNOVATIVE BeepLit™ CONTINUITY

Quick Open-short Tests on Switches and Wires; Beep + Backlight Effects for Noisy Environments

FULLY AUTO-RANGING

Shortens the Time to Measure and Increases the Ease of Use

LOGIC LEVEL Hz AND %

Measures Digital Logic Level Frequencies and Duty Cycles

BACKLIGHTED LCD DISPLAY

For Easy Viewing in The Dark; 16 mins Auto-Off to Save Battery Power

0.03% BASIC DCV ACCURACY

Measures DCV up to 1000Vdc

REC MAX MIN AVG READINGS

Speedy Records Max, Min and Calculates Average Readings Over Time; Automatic APO Disable

dBm READINGS

Features 20 Selectable Reference Impedance Values

AutoV

Automatic Selection of ACV or DCV

LPF ACV & Hz FOR VFDs

Measures Voltage & Frequency of Most Variable Frequency Drives and Noisy Electrical Signals up to 1000Vac

LoZ GHOST-VOLTAGE-BUSTER

Low Ramp-up Input Impedance to Drain Ghost Voltages Leaving Only Hard Signal Meter Readings

BEEPJACK™ MIS-INPUT WARNING

Guards Against Improper Amps Terminals Plug-in for Voltage Measurements

RUGGED & DURABLE

Robust Enclosure; Precise & Reliable Rotary Switch; Premium Plating & Low Leakage PCB

INTELLIGENT AUTO-POWER-OFF (APO)

Stays ON While in Measurements; Intelligently Turns OFF to Extend Battery Life; Disable option

EMC

Superior Immunity to Interferences; Reliable Operations and Readings; Meets EN61326-1



ERGONOMIC & STREAMLINE BODY

Over-molded Holster Fits Nicely in One Hand; Reduced Size for Easy Carrying

RELATIVE ZERO

REL for Convenient Readings Comparison

DUAL SENSITIVITIES EF-DETECTION

Features Non-Contact (NCV) & Single-Pole Contact Voltage Detections; Selectable Hi/Lo Dual Sensitivities

LARGE 60,000 COUNTS LCD DISPLAY

5-5/6 Digits High Resolution; 5/Sec Fast Nominal Update Rate

DATA HOLD

Freezes the Displaying Reading for Later View

FAST ANALOG BAR-GRAPH

50/Sec Fast Nominal Update Rate

AUTOHOLD REAL-READ™

Shows Real-time Readings and automatically latches the last stable reading for later display

CREST MAX MIN PEAKS

Fast Captures +/- Peak Extremes at Durations as Short as 0.25ms; Automatic APO Disable

%4~20mA READINGS

Monitors and Verifies Process Control Loop Currents

TYPE-K TEMPERATURE

T1, T2 Dual Inputs; Selectable °C and °F Readings

INNOVATIVE BeepLit™ DIODE TEST

Short-Beep Alert on Forward Voltages <0.85V; Continuous Beep & Backlight Effects for Shorted Diode Continuities

CAPACITANCE

Up to 10mF for Measuring Motor Capacitors

LVD CAT III 1000V & CAT IV 600V

Certified EN61010-2-033, EN61010-1 & Relevant Standards on CAT III 1kV & CAT IV 600V

nS CONDUCTANCE

nS=1/GΩ virtually extends Resistance measurements to the order of GΩ

TRANSIENT PROTECTION

Up To 8kV 1.2/50µs Lightning Surge; Fully Certified by Independent Test Lab; Years of Credibility for Serious Users

RESISTANCE

Best Resolution 0.01Ω At 600Ω Range; 6 Auto-ranges Up To 60MΩ

