Digital Multimeter BENNING MM P3, MM 1-1 – MM 1-3, MM 1 – MM 4
reliable and precise in each and every situation


MM P3

BENNING MM P3
Pocket-Size Digital Multimeter

- top-class functionality and design
- even smaller and narrower with lower weight (only 130 g)
- minimum dimensions: 132 x 86 x 19 mm
- for all-purpose use with leather case and measuring leads

BENNING MM 1-1, MM 1-2 and *MM 1-3*
Digital Multimeters with Volt Sensor Function

- the integrated Volt sensor signalises phase voltages by means of an acoustic signal and a red LED signal
- it localizes cable breaks and defective lamps in exposed cables (cable reel, light chains) via the feeding side of the phase





MM 1-1 MM 1-2 MM 1-3


MM 1 MM 2 MM 3

tested and approved

IEC/EN 61010-1
(DIN VDE 0411-1)

BENNING MM 1, MM 2, MM 3 and *MM 4*
Digital Multimeter
Technology that inspires, Quality that convinces

Million fold proven as well as tested and approved by the independent VDE Test and Certification Institute according to current international standards.

- basic measuring for current, voltage, resistance, continuity, diode, capacity and frequency
- automatic and/or manual measuring range selection
- safe current measuring up to 300 A AC via attachable current clamp adapter (*MM 4*)


MM 4

Digital Multimeter

	BENNING MM P3	*BENNING MM 1-1*	*BENNING MM 1-2*	*BENNING MM 1-3*	*BENNING MM 1*	*BENNING MM 2*	*BENNING MM 3*
indicating range	5000	2000	2000	2000	3200	2000	2000
basic accuracy	0.6 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %
AC voltage	0.1 mV - 600 V	0.1 mV - 750 V	0.1 mV - 750 V	0.1 mV - 750 V	1 mV - 600 V	0.1 mV - 750 V	0.1 mV - 600 V
DC voltage	0.1 mV - 600 V	0.1 mV - 1000 V	0.1 mV - 1000 V	0.1 mV - 1000 V	0.1 mV - 600 V	0.1 mV - 1000 V	0.1 mV - 600 V
AC current	–	–	1 mA - 10 A	1 mA - 10 A	–	0.1 µA - 20 A	0.1 µA - 20 A
DC current	–	–	1 mA - 10 A	1 mA - 10 A	0.1 µA - 3.2 mA	0.1 µA - 20 A	0.1 µA - 20 A
resistance	0.1 Ω - 40 MΩ	0.1 Ω - 20 MΩ	0.1 Ω - 20 MΩ	0.1 Ω - 20 MΩ	0.1 Ω - 32 MΩ	0.1 Ω - 20 MΩ	0.1 Ω - 20 MΩ
continuity/diode	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes
frequency	1 mHz - 5 MHz	–	1 Hz - 20 MHz	1 Hz - 20 MHz	–	–	1 Hz - 200 kHz
capacity	10 pF - 100 µF	–	1 pF - 2 mF	1 pF - 2 mF	–	–	1 pF - 200 µF
temperature	–	–	–	-20 °C up to +800 °C	–	–	–
volt sensor	–	yes	yes	yes	–	–	–
interface	–	–	–	–	–	–	–
software	–	–	–	–	–	–	–
memory	HOLD	HOLD	HOLD, MAX/MIN	HOLD, MAX/MIN	HOLD	–	–
Data Log function	–	–	–	–	–	–	–
measuring method	RMS	RMS	RMS	RMS	RMS	RMS	RMS
measuring category	CAT III 300 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 300 V
item no.	044084	044081	044082	044083	044027	044028	044029

Digital Multimeter BENNING MM 7 – MM 11
safety and functional diversity without any compromises

BENNING MM 7-1
Digital Multimeter offering highest safety for industrial applications

- TRUE RMS measuring method for precise measuring results even for non-sinusoidal signal characteristics
- highest measuring category CAT IV 600 V for highest safety
- AutoV function for automatic AC/DC voltage detection and low input impedance (LoZ) to suppress capacitively/inductively induced voltages
- integrated Volt sensor for non-contact signalling of phase voltages and cable breaks in lines
- LC display with bargraph indication and background lighting

BENNING MM 8, MM 9, MM 10
Digital Multimeter of the highest measuring category CAT IV

NEW!

- highest measuring category CAT IV 600 V allows measurements direct at the source of the low-voltage installation
- precise due to TRUE RMS measuring method
- transmitting measuring results via optical USB interface
- delivery including software *BENNING PC-Win MM 10*

volt sensor



CAT IV 600 V

TRUE RMS

MM 7-1
(available as of 2010)
MM 7 fig. similar

BENNING MM 11
Precision Digital Multimeter with extraordinary features of performance

- highest measuring accuracy of 0.06 % due to TRUE RMS measuring method and 20000 digit resolution
- an ideal measuring device for recording of measuring processes
- large memory capacity of 1000 storage locations and 40000 storage locations for Data Log functions
- transmitting measuring results via optical USB interface
- delivery including software *BENNING PC-Win MM 11*

USB



TRUE RMS

MM 11

USB



CAT IV 600 V
MM 8

CAT IV 600 V
TRUE RMS
MM 9

CAT IV 600 V
TRUE RMS
MM 10

Software ***PC-Win MM 10/MM 11***



BENNING PC-Win MM 10/MM 11
Software for logging and analysis

- software for reading and logging of measurement series
- visualisation of measurement series via line diagram and table
- scanning rate variable from 0.5 sec. up to 10 min.
- storage of measurement series as text file

tested and approved

IEC/EN 61010-1
(DIN VDE 0411-1)

Digital Multimeter

	BENNING MM 4	*BENNING MM 7*	*BENNING MM 7-1*	*BENNING MM 8*	*BENNING MM 9*	*BENNING MM 10*	*BENNING MM 11*
indicating range	4200	4000	6000	6000	6000	6000	20000
basic accuracy	0.5 %	0.25 %	0.08 %	0.5 %	0.5 %	0.5 %	0.06 %
AC voltage	1 mV - 600 V	1 mV - 750 V	0.1 mV - 1000 V	0.1 mV - 750 V	0.1 mV - 750 V	0.1 mV - 750 V	1 µV - 750 V
DC voltage	1 mV - 600 V	0.1 mV - 1000 V	10 µV - 1000 V	0.1 mV - 1000 V	0.1 mV - 1000 V	0.1 mV - 1000 V	1 µV - 1000 V
AC current	0.1 A - 300 A	10 µA - 10 A	10 µA - 10 A	–	1 mA - 10 A	1 mA - 10 A	1 µA - 10 A
DC current	–	10 µA - 10 A	10 µA - 10 A	0.1 µA - 6 mA	0.1 µA - 10 A	0.1 µA - 10 A	1 µA - 10 A
resistance	0.1 Ω - 42 MΩ	0.1 Ω - 40 MΩ	0.1 Ω - 40 MΩ	0.1 Ω - 60 MΩ	0.1 Ω - 60 MΩ	0.1 Ω - 60 MΩ	10 mΩ - 2 GΩ
continuity/diode	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes
frequency	–	1 Hz - 40 MHz	0.1 Hz - 100 kHz	1 Hz - 60 MHz	1 Hz - 60 MHz	1 Hz - 60 MHz	0.01 Hz - 1 MHz
capacity	–	1 pF - 40 mF	1 nF - 10 mF	1 pF - 6 mF	1 pF - 6 mF	1 pF - 6 mF	1 pF - 40 mF
temperature	–	-20 °C up to +800 °C	-40 °C up to +400 °C	–	–	–	-200 °C up to +1200 °C
volt sensor	–	–	yes	–	–	–	–
interface	–	–	–	–	–	USB	USB
software	–	–	–	–	–	*PC-Win MM 10*	*PC-Win MM 11*
memory	HOLD	HOLD, MAX/MIN	HOLD, MAX/MIN	HOLD, MAX/MIN	HOLD, MAX/MIN	HOLD, MAX/MIN	1000 memory locations
Data Log function	–	–	–	–	–	–	40000 memory locations
measuring method	RMS	TRUE RMS	TRUE RMS	RMS	TRUE RMS	TRUE RMS	TRUE RMS
measuring category	CAT III 300 V	CAT III 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT III 600 V
item no.	044073	044076	044085	044077	044078	044079	044080



All Digital Multimeters including protective case, safety leads and battery set.