Digital Multimeter

technical data

type BENNING	MM 12	MM 10-PV	MM 10-1	MM 7-2	MM 6-2
special features	Logging Multimeter for professional use. With data logger, Bluetooth®, PC software and app.	For photovoltaic systems and for applications with high voltages up to 1500 V AC/ 2000 V DC. With data logger, Bluetooth® and app.	For HVAC and for service use in harsh environments. With data logger, Bluetooth® and app.	Top performance, quality and safety for all demanding measuring tasks.	With highest safety, "AutoV" and "LoZ" function.
Display					
indicating range	4 000 / 40 000	6 000	6 000	60 000	6 000
bar graph / backlight	• / •	• / •	• / •	• / •	• / •
Measuring functions					
basic accuracy	0.5 %	0.5 %	0.5 %	0.03 %	0.5 %
measuring method	TRUE RMS	TRUE RMS	TRUE RMS	TRUE RMS	TRUE RMS
AC voltage	10 µV - 1000 V	100 µV - 1000 V (1500 V via TA PV)	100 µV - 1000 V	10 µV - 1000 V	100 µV - 1000 V
DC voltage	10 µV - 1000 V	100 µV - 1000 V (2000 V via TA PV)	100 µV - 1000 V	10 µV - 1000 V	100 µV - 1000 V
AC current	10 µA - 10 A	1 mA - 10 A	0.1 µA - 400 mA	0.01 µA - 10 A	20 mA - 10 A
DC current	10 µA - 10 A	1 mA - 10 A	0.1 µA - 400 mA	0.01 µA - 10 A	1 mA - 10 A
resistance	0.1 Ω - 40 MΩ	0.1 Ω - 40 MΩ	0.1 Ω - 40 MΩ	0.01 Ω - 60 MΩ	0.1 Ω - 40 MΩ
frequency	5 Hz - 100 kHz	1 Hz - 100 kHz	1 Hz - 100 kHz	5 Hz - 1 MHz	1 Hz - 100 kHz
capacity	0.01 nF - 40 mF	1 nF - 10 mF	1 nF - 10 mF	0.01 nF - 10 mF	1 nF - 10 mF
temperature	-200 °C up to +1200 °C	-40 °C up to +400 °C	-40 °C up to +400 °C	-200 °C up to +1090 °C	–
continuity/diode	• / •	• / •	• / •	• / •	• / •
indication (continuity)	buzzer	buzzer / red LED	buzzer / red LED	buzzer / LCD	buzzer / red LED
volt sensor (single-pole external conductor test / cable break detector)	•	•	•	•	•
Features					
interface	Bluetooth®, USB	Bluetooth®	Bluetooth®	–	–
software	PC-SW, app (IOS, Android)	app (IOS, Android)	app (IOS, Android)	–	–
filter function	HFR (800 Hz)	HFR (800 Hz)	HFR (800 Hz)	HFR (1000 Hz)	–
measuring range switching	automatic / manual	automatic	automatic	automatic / manual	automatic/ manual
Auto Power Off / low battery indication	• / •	• / •	• / •	• / •	• / •
Data HOLD / MAX / MIN / AVG	• / • / • / •	• / • / • / –	• / • / • / –	• / • / • / •	• / – / – / –
PEAK	•	–	–	•	•
AutoV / LoZ	• / •	– / –	• / •	• / •	• / •
relative value function (REL)	•	•	•	•	•
level measurement (dB/dBm)	•	–	–	–	–
memory MEM	1 000 measuring values (A-SAVE, SAVE)	–	–	–	–
Data Log function	40 000 measuring values (interval: 1s - 600 s)	4 000 measuring values (interval: 1s - 600 s)	4 000 measuring values (interval: 1s - 600 s)	–	–
measuring category	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V
Scope of delivery					
carrying case / batteries / fuses	• / • / •	• / • / •	• / • / •	• / • / •	• / • / •
measuring leads / TA PV / alligator clips	• / – / –	• / • / •	• / – / –	• / – / –	• / – / –
rubber holster / with magnetic hanger	• / •	• / •	• / •	• / –	• / •
wire temperature sensor (K)	•	•	•	•	–
PC software / USB data cable	•	–	–	–	–
operating manual / calibration certificate	• / •	• / –	• / –	• / –	• / –
Generally					
dimensions* (mm) / weight*	206 x 94 x 54 / 640 g	163 x 82 x 50 / 425 g	163 x 82 x 50 / 425 g	193 x 89 x 51 / 420 g	163 x 82 x 50 / 410 g
item no.	044088	044089	044687	044690	044087

Measuring range indications refer to ranges from highest resolution to the final measuring range value

* incl. rubber holster