

Specifications METES 12/32



System concept	Single- and three-phase reference meters for testing electricity meters. Two versions of the single-phase reference meter are available, designed for direct current measurement or for use with error-compensated current clamps (KoCoS <i>SmartProbe</i> technology). The devices are operated and controlled using just four function keys. All the measurement data and necessary parameters are saved in an internal memory. The measurement electronics are accommodated in a robust, waterproof housing.		
Product specifications	METES 12.1 - Internal	Single phase reference meter with internal current measurement. Ideal for testing prepayment meters.	
	METES 12.2 - External	Identical to METES 12.1, but uses error-compensated current clamps for current measurement. Ideal for testing Ferraris electricity meters.	
	METES 32	Portable, three-phase reference meter for testing electronic and Ferraris electricity meters.	
Functions	Measurement functions	Meter testing	Determination of the accuracy of electricity meters, with direct error display.
		Measured quantities	Voltage Current Frequency Phase angle Power factor Power quantities (W, var, VA) per phase and in total
	Current measurement	METES 12.1	Direct current measurement with high-precision current transducers. Measuring ranges: 1 A, 5 A, 15 A. Manual or automatic measuring range selection.
		METES 12.2 / 32	Current measurement with external current clamp(s). Measuring ranges: 1 A, 10 A, 100 A. Manual or automatic measuring range selection.
	Data storage	Measured values and test results are stored in an internal database. Using the software provided, this data can be transferred to an external PC for test report generation and archiving.	
Complete system	Environment	Operating temperature	0 to 50°C
		Storage temperature	-20 to 60°C
		Relative humidity	5 to 90%, non-condensing
		Safety standard	EN 61010-1 300 V-CAT II
		EMC emissions	EN 50081-2 industrial
		Susceptibility	EN 50082-2 industrial

Product specifications

	METES 12.1	METES 12.2	METES 32
Measuring ranges			
Voltage	1 x 85 to 250 VAC	1 x 85 to 250 VAC	3 x 85 to 250 VAC
Current, direct	1 x 1, 5, 15 AAC		
Current clamp		1 x 1, 10, 100 AAC	3 x 1, 10, 100 AAC
Frequency range	50 and 60 Hz	50 and 60 Hz	50 and 60 Hz
Accuracy class			
	0.2	0.2	0.2
Inputs for scanning heads			
	1	1	1
Display			
Alpha-numeric LCD screen, 4 x 20 characters	■	■	■
Operation			
Membrane keypad, 3x4 matrix and 4 function keys	■	■	■
Memory			
128 MB multi-media card	□	□	□
Power supply			
85 to 265 VAC, 45 to 65 Hz Supplied by measurement circuit	■	■	■
Interfaces			
RS232	□	□	□
USB	□	□	□
Housing			
	Polycarbonate waterproof case	Polycarbonate waterproof case	Polycarbonate waterproof case
Dimensions, (W x H x D) [mm]	230x170x100	230x170x100	230x170x100
Weight	0.6 kg	0.6 kg	0.8 kg
Scope of delivery			
Connecting leads for voltage	■	■	■
Connecting leads for current	■		
Current clamps		1	3
Scanning head for electronic meters	■	■	■
Hand switch for Ferraris meters	■	■	■
Scanning head for LED and meter disc	□	□	□

■ Standard

□ Optional