

Specifications EPOS 300



System concept	Constructed using DSP technology. The test quantities are calculated by a powerful signal processor and supplied to the device under test via high-accuracy digital-to-analog converters and electronic power amplifiers. EPOS is available in two variants with maximum output currents of 25 A and 12 A. The devices are operated and controlled using just four function keys and a jog dial, or an external PC. A special interface also allows the sources to be connected to and fully automatically controlled by the METES 340 REF reference meter.			
Amplifier outputs	All signals are completely independent with regard to phase, amplitude and frequency. All outputs have full overload and short-circuit protection. The output quantities of the current and voltage amplifiers are monitored by the system during tests (internal measurement). If they do not correspond to the setpoint values, a warning to this effect is issued by the programme. Connections to the device under test are made using 4 mm/6 mm safety banana connectors.			
General	Distortion	< 0.05% ¹⁾		
	Frequency accuracy	< 0.01 %		
	Frequency resolution	< 0.01 Hz		
	Phase angle	0 to 360°		
	Phase resolution	0.01°		
Voltage outputs	Voltage range	3 x 0 to 300 V/75 VA 1 x 0 to 600 V/150 VA		
	Accuracy	0.05% ¹⁾		
	Resolution	13 mV		
	Frequency range	DC to 3 kHz		
	Phase accuracy	< 0,1°		
Current outputs EPOS 300 (25A)	Range	3 x 0 to 25 A/85 VA		
	Accuracy	0.1% ^{1), 5)}		
	Resolution	1 mA		
	Frequency range	DC to 3 kHz		
	Phase accuracy	< 0.1°		
Current outputs EPOS 300 (120A)	Ranges, switchable	3 x 0 to 12.5 A/130 VA	3 x 0 to 60 A ⁴⁾ /40 VA	3 x 0 to 120 A ⁴⁾ /80 VA
	Accuracy	0.1% ¹⁾	0.2% ²⁾	0.2% ³⁾
	Resolution	1 mA	3 mA	5 mA
	Frequency range	DC to 3 kHz	40 to 70 Hz	40 to 70 Hz
	Phase accuracy	< 0.1°	< 0.2° ²⁾	< 0.2° ³⁾
DC output	Output range	12 to 260 V		
	Protection	Overload and short-circuit		
	Output power	50 W (constant across the range)		
	Accuracy	< 0.5%		
Binary inputs	Activation range	24 to 300 VDC		
	Max. input level	300 VDC		
	Protection	Transient protection, polarity protection and galvanic isolation via opto-couplers		
Binary outputs	Rated sw. capacity	0.5 A at 125 VAC 2 A at 30 VDC		
	Max. sw. capacity	250 VAC, 2 A, 62 VA 220 VDC, 2 A, 60 W		
	Protection	Potential-free output relays		

¹⁾ Performance and amplitude details are valid for a frequency range of 10 to 200 Hz

²⁾ At rated load $R_L=10\text{ m}\Omega$

³⁾ At rated load $R_L= 5\text{ m}\Omega$

⁴⁾ Continuous output of max. current at rated load (see points ²⁾ and ³⁾) and with a terminal voltage of ~ 0.7 VAC

⁵⁾ Range: 0 to 16 A

Complete system**Operational interface** EPOS system software for Windows® 2000/XP/Vista

Power supply Rated voltage 90 to 264 VAC, 47 to 63 Hz
Power consumption
EPOS 300 (25A): max. 900 VA
EPOS 300 (120A): max. 1200 VA

Connections All operation connection points are located on the front panel.
4 mm/6 mm safety banana connectors are used.

Interfaces RS232, USB, Ethernet (optional), interface for connection to METES 340 REF

Housing Portable 19"/3 HU or 4 HU high case, the carrying handle can also be used as a stand

Dimensions (W x H x D) without stand:

EPOS 300 (25A): 470x162x316 mm

EPOS 300 (120A): 470x204x316 mm

Weight:

EPOS 300 (25A): 10 kg

EPOS 300 (120A): 18 kg

Environment

Operating temperature	0 to 50°C
Storage temperature	-20 to 60°C
Relative humidity	5 to 90%, non-condensing
Protection	IP20
Safety standard	EN 61010-1 300 V~CAT II
EMC emissions	EN 50081-2 industrial
Susceptibility	EN 50082-2 industrial