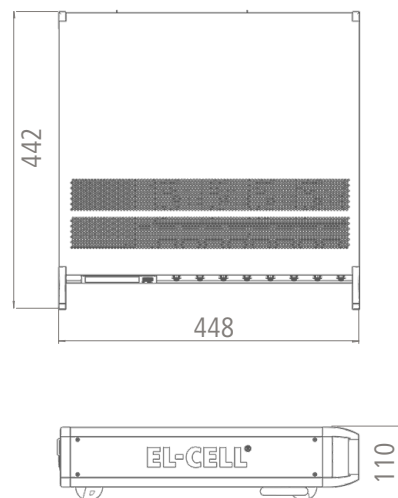




Dimensions in mm:



PAT-Tester-8

The compact multichannel test solution

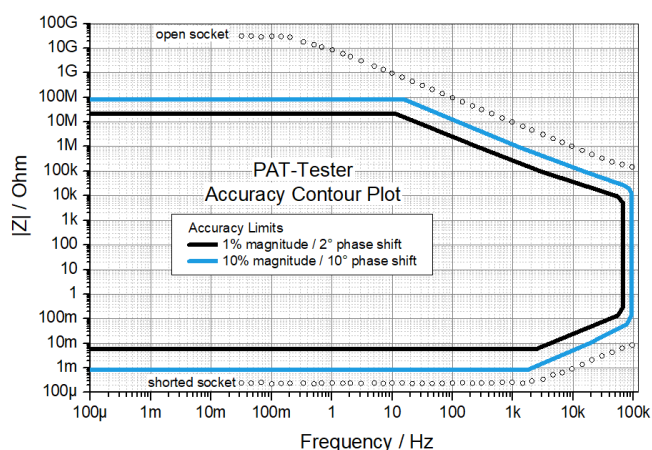
The PAT-Tester-8 delivers eight high-precision measurement channels in a compact design. Stackable and compatible with 19-inch racks, it adapts to your needs — from single-cell tests to high-throughput setups. Its state-of-the-art electronics, shared with the proven PAT-Tester-i-16 and PAT-Tester-x-8, offer fully independent potentiostat/galvanostat and EIS functions, ideal for precise measurements on small-format battery cells. Specially shielded cell cables minimise interference and ensure reliable results.

The PAT-Tester-8 comes with EL-Software, providing comprehensive tools to design, manage, and monitor your experiments with ease.

Product website:



Accuracy contour plot



Specifications

General	Width / Depth / Height (in mm)	448 / 442 / 110
	Weight	4,6 kg
	Channels per device	8
	Control Voltage / Compliance Voltage	-7 V to +7 V / -8 V to 8 V (no load)
	Current	±100 mA
	Cell connection / Electrode connection	3 electrodes plus sense wires, connection matrix
	ADC	2 x 24 bit
	DAC	1 x 18 bit
	Slew rate	2.5 V / μ s
	Bandwidth ranges	500 kHz, 50 kHz, 5 kHz
	Sampling interval (rate)	1 ms (1000 samples per second) with intelligent data recording
	Input Impedance	>100 M Ω 20 pF
	Computer Interface	1 GBit Ethernet, Multiuser, Runs standalone (immune to network interruptions)
Voltage	Acquisition voltages	Full cell voltage, both half cell voltages, auxiliary voltage
	Measurement Accuracy	±0.02% of FSR (Full Scale Range)
	Measurement Noise floor	30 μ V peak-peak typical
	Control Resolution	57 μ V (18 Bit)
Current	Current Ranges	±100 mA, ±10 mA, ±1 mA, ±100 μ A, Autorange
	Measurement Accuracy	±0.05% of FSR
	Measurement Noise floor	<1 μ A @ 100mA, <100 nA @ 10mA, <10 nA @ 1mA, <1 nA @ 100 μ A
	Control Resolution	1 nA min. (18 bit)
Impedance (each channel)	Frequency range	100 μ Hz to 100 kHz
	Impedance mode	PEIS and GEIS (simultaneous measurement of full- and half-cell impedances)
	Impedance range	1 m Ω to 100 M Ω
	EIS quality indicator	SFDR (Spurious Free Dynamic Range)
	EIS drift correction	yes
	EIS adaptive amplitude	yes
Other	Additional data input (each channel)	Multiple digital I ² C bus sensors, e.g. for cell temperature and gas pressure, 1x analog voltage input, e.g. for dilatometer signal
	Calibration	Fully automatic self-test and self-calibration with internal voltage references and internal calibration cells (maintenance-free)
	Cell Identification	Supports PAT-Button for reading the unique test cell serial number
	Software features	Experiment designer, Cell and material management with database, Script editor with syntax check, Live data monitoring, Analysing and reporting capabilities
	Display	LC display for showing defined cell parameters and channel information