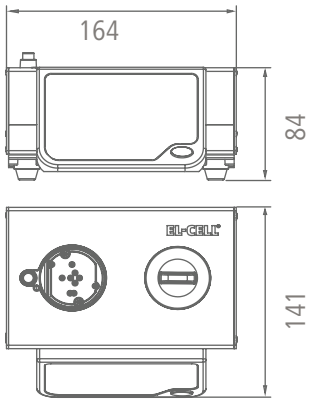
Dimensions in mm:



PAT-Terminal-1

Powerful assistance in the glovebox

The PAT Terminal-1 greatly simplifies your workflow when assembling PAT series test cells in the glove box. It is an advanced PAT-Channel-1 that can perform impedance measurements and other quick functional tests of your test cells as a stand-alone device.
Insert the newly built cell into the PAT-Terminal-1 and directly read the electrical values and sensor signals like force, pressure, or dilation on the large display.
This allows you to make precise sensor adjustments for in-situ cells such as the PAT-Cell-Force directly in the glove box or to check the electrical values immediately after assembly.

Of course, the PAT-Terminal-1 is also a fully equipped test channel with all PStat / GStat / EIS abilities and can be connected as usual to the controller unit of a PAT-Tester-x-8.

Use Cases:

- Stand-alone device for cell sensor adjustment and functionality tests
- Fully equipped test channel with PStat / GStat / EIS for use in a PAT-Tester-x setup

Product website:

Key Features

- Fully equipped test channel with PStat / GStat / EIS
- Can be operated as a stand-alone device directly in the glovebox
- Can perform cell functionality checks (e.g. impedance)
- Integrated display showing live data of inserted test cell
- Can be used as test channel in a PAT-Tester-x-8 setup

EL-Cell GmbH Tempowerkring 8 21079 Hamburg, Germany +49 40 79012-734 sales@el-cell.com el-cell.com

Specifications

General	Width / Depth / Height (in mm)	164 / 141 / 97
	Weight	1.5 kg
	Channels per device	1
	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, switch matrix
	ADC	2 x 24 bit
	DAC	1 x 18 bit
	Slew rate	2.5 V / µs
	Bandwidth ranges	500 kHz, 50 kHz, 5 kHz
	Sampling interval (rate)	1 ms (1000 samples per second) with intelligent data recording
	Input Impedance	>100 MΩ || 20 pF
	Computer Interface	1 GBit Ethernet, Runs standalone, Multiuser
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 µV peak-peak typical
	Control Resolution	57 µV (18 Bit)
Current	Current Ranges	±100 mA, ±10 mA, ±1 mA, ±100 µA, Autorange
	Measurement Accuracy	±0.05% of FSR
	Measurement Noise floor	<1 µA @ 100mA, <100 nA @ 10mA, <10 nA @ 1mA, <1 nA @ 100µA
	Control Resolution	1 nA min. (18 bit)
Impedance (each channel)	Frequency range	100 µHz to 100 kHz
	Impedance mode	PEIS and GEIS (simultaneous measurement of full- and half-cell impedances)
	Impedance range	1 mΩ to 100 MΩ
	EIS quality indicator	SFDR (Spurious Free Dynamic Range)
	EIS drift correction	yes
	EIS adaptive amplitude	yes
Other	Additional data input (each channel)	(I^2C) sensor signal (e.g. for cell temperature) Analog sensor signal(e.g. for gas pressure)
	Calibration	Fully automatic self-calibration with internal voltage reference and three internal calibration cells
	Cell Identification	PAT-Button with unique serial number stored in EEPROM
	Software features	Experiment designer, Cell and material management with database, Script editor, Live data monitoring, Analysing and reporting capabilities