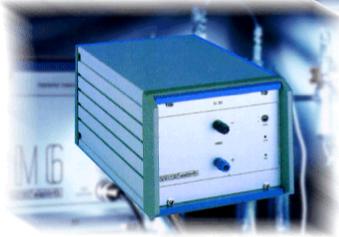


One-Quadrant Potentiostat EL 101/300

Add-on modules for IM5/6 impedance spectrum analysers

Modern electrochemistry





at high currents

IN impedance spectroscopy, cyclic voltammetry, polarisation curves ... FOR fuel cells, electrolysis, electro-plating ...



Power potentiostats and electronic loads today are indispensable tools in several fields of electrochemistry, e.g. in the research of fuel cells. The potentiostats of the EL-series are designed to sink high currents up to 25A/100A at a total power dissipation of up to 100W/300W (EL101/EL300). Both modules may be connected in full cell or half cell schemes. Using an external precision power supply you easily can extend an electronic load of the EL-series to a two-quadrant potentiostat you need e.g. in the field of electrolysis.

The EL101/300 is controlled by EPC4, a plug-in module for the impedance spectrum analyser IM5/6. Due to the built-in microprocessor system up to 16 EL101/300 can be controlled by one IM5/6. Each EPC4 can address up to four EL-modules, up to four EPC4 cards you can install in one IM5/6 system. Each potentiostat will hold all its values from one control-access to the next one so that absolutely no potential- or current-disturbances can occur when scanning the potentiostats. With more than one EL-module connected you can run series-measurements where spectra are taken from all modules in a definable order.

The EL-series modules are embedded completely in the IM5/6 environment. Thus all acquisition- and analysis-techniques that run on the IM5/6 can be used with these modules as well. Installation of one or more EL-modules will upgrade your IM5/6 to an even more versatile high-current impedance spectrum analyser system.

Supported Methods	Software Module
Impedance spectroscopy	IM
Cyclic voltammetry	CV
Polarisation curves	CV
Arbitrary current/potential/time measurements	PVI
Capacity/potential measurements	C/E
Automatic series measurements	AS

Specifications	EL101	EL300
Operating modes	potentiostatic / galvanostatic	
Potential range	±4V / ±12V	
Potential accuracy	0.25%	
Current range	0A 25A	0A 100A
Current accuracy	0.25%	1%
Power dissipation	100W @ T _a	25W @ T _a
-		300W water cooled
Ambient temperature	0°C 25°C	
Frequency range	10μHz 10kHz	10μHz 3kHz