

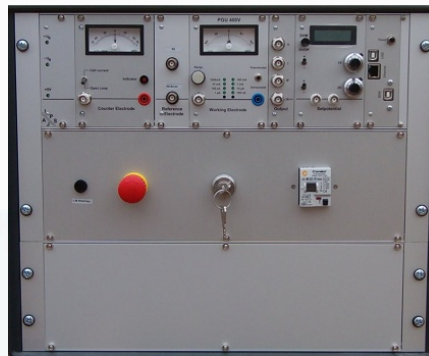


## Overview

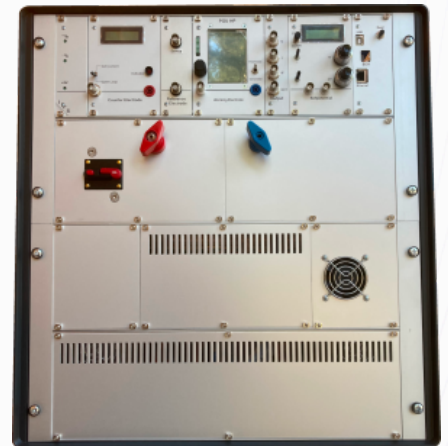
PGU-High Precision



PGU-High Potential



PGU-High Power



## Description

The **PGU-HP** series, standing for **high precision**, **high potential** and **high power**, serves as the foundational element for our sophisticated laboratory devices, which are available for procurement in a multitude of designs that cater to a variety of specifications, including different voltage and current ranges that are tailored to meet the specific requirements of our esteemed clientele.

Current measurements can be accommodated within a broad spectrum that ranges from a minimal 1A all the way up to an impressive maximum of 200A, while voltage capabilities can extend from a low threshold of 10V to an elevated ceiling of 400V, ensuring that you can meet diverse experimental needs and conditions. Furthermore, we provide the flexibility to operate within the smallest measuring range, which can be as precise as 100nA, thereby allowing for detailed and accurate readings in sensitive applications. Each of our devices is accurately crafted and is offered in configurations that include both options with and without an impedance module, providing our users with the adaptability they require for various testing scenarios. This versatility in design and functionality underscores our promise to delivering high-quality laboratory equipment that meets the dynamic needs of modern scientific research and experimentation. Ultimately, our array of PGU-HP devices stands as a testament to our unwavering dedication to excellence in the field of laboratory instrumentation, ensuring that researchers and technicians have access to the optimal tools necessary for their work.

## Technical details

Output parameter			
	High Precision	High Potential	High Power
Compliance voltage	± 13V	± 230V	± 12V
Polarisation range	± 10V	± 200V	± 10V
Current range	10 steps from 1A to 100nA	10 steps from 2A to 1µA	9 steps from 100A to 1µA
Supply parameter			
Supply voltage	115/230V		
Supply current	3A	3A	10A
General parameter			
Modes	Potentiostat and Galvanostat		
Impedance analyzer	optional		
Electrode connections	4 electrodes (CE, RE, WE, WE-Sense)		
Floating mode	switchable		
Resolution	100 nA=10000 mV, in 100 nA range 10 pA=1 mV		
Electrometer input impedance RE	10 <sup>13/15</sup> Ω	10 <sup>11</sup> Ω	10 <sup>13</sup> Ω
Bandwidth	Up to 100kHz		
ADC	24 bit, max. resolution 1 µV		
DAC	26 bit at ±10 V → 330 nV steps		
Resolution of setvalue	< ±10 mV, ±0,01 %		
Resolution of measurements	< ±10 mV, ±0,01 %		
Sample rate	Standard 200 Hz at 24 bit, 1 kHz at 16 bit		
Interface	Ethernet/ USB		
Software	EcmWin, EcmView		
Methods	OCP, hold experiments, reversed scan cyclic voltammetry, chronoamperometry, sequence measurement with battery charging and discharging functions, measurement current density versus time, current density versus potential		
Additional inputs	2 BNC connectors for external scanner		
Additional outputs	4 BNC for connection of instruments, output: potential, current, current with 10Hz filter, current with x 10 amplifier current as ±10 V voltage		