

PGU-1/2-OEM



Overview

Potentiostat, Galvanostat

- Software controlled operation
- High resolution interface: 24 bit data acquisition, 26 bit scan resolution (330 nV)
- Communication via Ethernet
- Main Power 115 V/230 V

Description

The devices of our **PGU series** are standard laboratory equipment which provides a high degree of transparency and flexibility.

The **PGU-OEM Series** is a reduced form of the standard instruments. Two built in instruments show potential and current as digital values. Operation is exclusively software controlled.

The instrument can perform simple interactive as well as more complex experiments. Transparency is kept, even when the automated tests are running. Observation of the measurements can be displayed via the digital instruments and/or with the graphical display of the software on the computer monitor.

The device design is very flexible and offers the possibility to build different types out of a base device.

The **PGU-1/2A-OEM** has the same performance features as the **PGU 10V-1A-E**, however it is a purely computer controlled device. It is intended primarily for OEM solutions where the client creates own applications and uses merely the communication routines of the interface. Depending on the requirements, the device is mounted in a rack. So the customer can choose the cabinet or case he needs for his application..

Technical Details

Supply voltage	9 – 18 V DC via wide range desktop power supply double galvanically isolated (in floating mode) Power supply: Input: 100 – 240 V, 47 – 63 Hz, 1,6 A max, output: 12 V DC, 8 A max.
Modes	Potentiostat and Galvanostat
Impedance analyzer	None
Electrode connections	2, 3 Electrode (CE, RE, WE)
Floating mode	Yes, switchable
Compliance voltage	±12 V
Maximum current	±1000 mA/ ±2000 mA
Polarization ranges	±10 V Potentiostat ±1000 mA/ ±2000 mA Galvanostat.
Current ranges	8 steps from 1000 mA to 100 nA/2000 mA to 1 µA
Resolution	100 nA = 10000 mV in 100 nA range, 10 pA = 1 mV/1 µA = 10000 mV in 1 µA range, 100 pA = 1 mV
Electrometer input impedance RE	10 ¹³ Ω
Bandwidth	10 kHz
ADC	24 bit, max. resolution 1 µV
DAC	26 bit at ±10V → 330 nV steps
Resolution of setvalue	< ±1 mV, ±0,01%
Resolution of measurement	< ±1 mV, ±0,01%
Sample rate	Standard 200 Hz at 24 bit, 1 kHz at 16 bit
Interface	Ethernet
Software	EcmWin, EcmView
Measurement	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	None
Additional outputs	None