

# PGU-30V-20A



## Overview

### High power Potentiostat/Galvanostat

- High-resolution interface: 24 bit data acquisition, 26 bit scan resolution (330 nV)
- Communication via ethernet
- Control inputs and outputs for external control
- Automatic operation with built-in interface.
- Mains operation 230 V

## Description

The **PGU-30V-20A** unit offers a wide range of applications, typical in electroplating (cathodic dip coating), anodizing of aluminium and battery research.

The device supplies a compliance voltage of  $\pm 35V$  at a current of  $\pm 20A$  to the counter electrode. The polarization voltage is  $\pm 30V$  (600W). With 8 measuring ranges from 20A to 10 $\mu$ A, the user gets also reasonable values at lower currents.

Automation of measurement is realized via our software **EcmWin**. Standard measurement methods are: open circuit potential, potentiostatic/dynamic, galvanostatic/dynamic, pulse and hold experiments, reversed scan, cyclic voltametry and sequence measurement (including battery load and unload methods).

All tests are performed with limit value monitoring. Data are recorded in ASCII format, so further processing of the results is uncomplicated. Data acquisition is performed with max. 1000 values/s per channel, storage with max.1000 values/s per channel.

## Technical Details

Compliance voltage	$\pm 36V$
Current	$\pm 20A$
Polarisation range	$\pm 30V$ Potentiostat $\pm 20A$ Galvanostat.
Current ranges	8 ranges: 20A to 10 $\mu$ A.
Resolution	1nA = 1mV in 10 $\mu$ A range
Input impedance	10 <sup>13</sup> Ohm.
Interface	Ethernet
A/D, D/A converter	24Bit, Polarisation 26 Bit
Scanrate	1 $\mu$ V/s up to 10.000mV/s
Data acquisition	max. 1000 values/s
Methods	OCP, constant value, linear and cyclic sweep, pulses, sequence
Output	Potential, current, current with 40Hz filter, current with x10 amplifier
Input	Potential, current, current with 40Hz filter, current with x10 amplifier
Size of case	500mm x 500mm x 400mm (WxDxH)