

COMPACTSTAT.e:



e10800/e20250 Hardware specifications

System Performance:

Current compliance
Maximum output Voltage
Potentiostat Bandwidth
Stability settings
Programmable response filter
Signal acquisition

e20250

±250 mA
±20 V
>3 MHz
High Speed, Standard, and High Stability
1 MHz , 100 kHz , 10 kHz , 1 kHz , 10 Hz
dual channel 16 bit ADC, 100.000 samples/sec

e10800

±800 mA at ±8 V; ±500 mA at ± 10 V
±10 V

Potentiostat:

Applied potential range
Applied potential accuracy
Current ranges
High sensitivity current ranges
Measured current resolution

±20 V (0.66 mV resolution) ±10 V (0.333 mV resolution)
0.2%, or 2 mV
±10 nA to ±1 A
±1 pA, ±10 pA, ±100 pA, ±1 nA
0.015% of current range, minimum 0.15fA

Galvanostat

Applied current resolution
Applied current accuracy
Potential ranges
Measured potential resolution

0.033% of applied current range
0.2%
±2 mV, ±20 mV, ±200 mV, ±1 mV, ±10 mV, ±100 mV,
±2 V, ± 20V ±1 V, ± 10V
0.003% of potential range, minimum 16nV

Impedance Analyser

Frequency range
Amplitude
DC offset
Dynamic range

10µHz to 3MHz
0.015mV to 1.0V, or 0.03% to 100% of current range
16 bit dc offset subtraction, and 2 dc-decoupling filters
12 nV to 20 V,
and 0.05 fA to 250 mA 12 nV to 10 V,
and 0.05 fA to 500 mA

Electrometer

Input impedance
Input bias current
Bandwidth

>1000 Gohm //<8pF
<10 pA
>16 MHz

Special functions

Ohmic drop compensation
Safety features

2 V/current range, 16 bits resolution
automatic disconnect on internal/external exceptions

Peripheral connections

8 Analog in, and 2 analog out
2 Digital inputs, and 3 Digital outputs
I-out, and E-out
AC-out
Channel-X, and Channel-Y inputs

0 to +4 V, 16 bits resolution
0 to +5 V
analog monitor for cell current and potential
±0.5 V sinewave 10µHz-2MHz with variable attenuation
±4 V: to record impedance from peripheral devices

Environment

power requirements USB powered mode
external adapter
at DC-connector

Not available
100-240 V, 45-65 Hz, 12 VA
5 V, 4 A

Interfacing

Size

Weight

PC requirements

USB 1.1, 2.0 and 3 compliant
w x d x h = 12 x 13 x 2.5 cm
0.7 kg
Windows XP/Vista/7/8, with free USB port