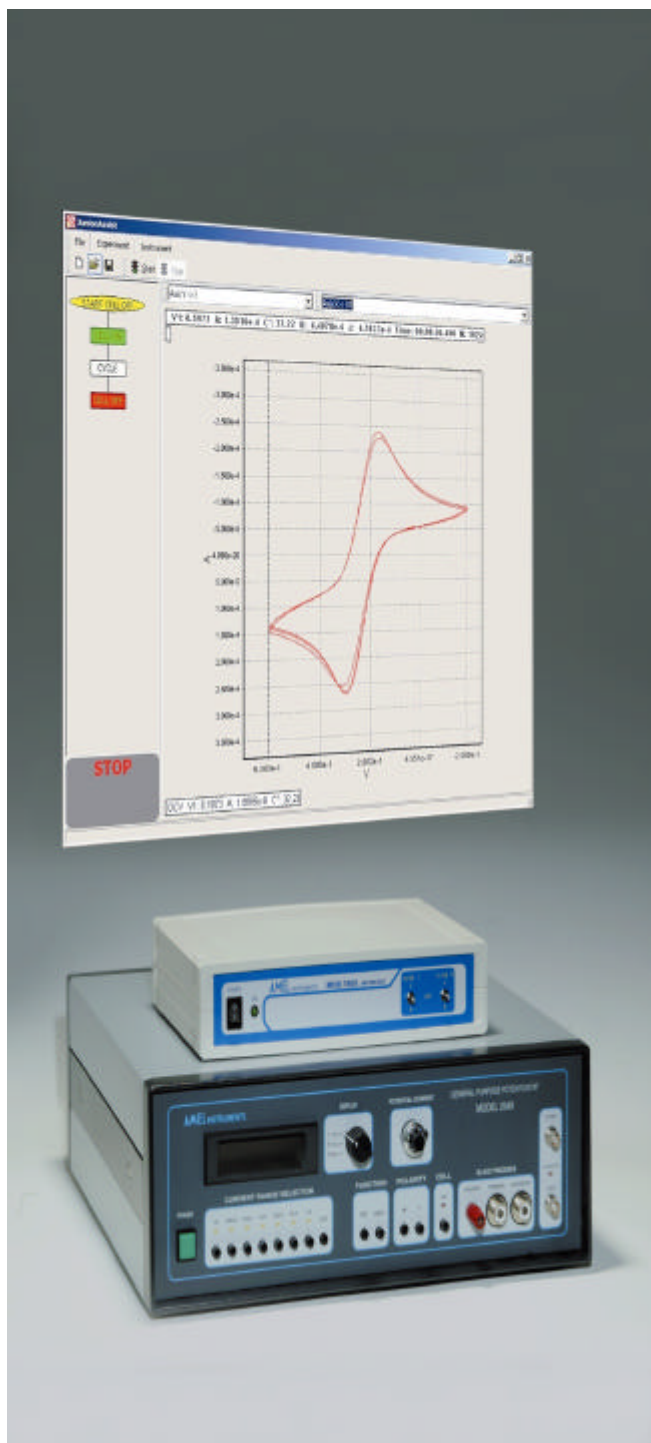


Model 7800 AMEL INSTRUMENTS

*16 bit interface and function generator
for AMEL 2000 series*



AMEL has a 40 year old presence in the electrochemistry world , and during all this time, passing through different series of instruments, our main effort was keeping our customers happy to be with us .

So, introducing the all new 7000 series, with so many improvements and features over the previous 2000 series, we thought how to allow our customers use all these on their equipment.

The 7800 is the solution to this problem, offering to the user all the new features like the 16 bit A/D and D/A, an additional voltage **AMEL helps you keeping your investments' value high** !channel, temperature measures, galvanically insulated USB

interface, a flexible function generator and, more than this, full compatibility with the new Junior Assist and Master Assist software.

Due to the structure of this interface, that shares the same high technology of all 7000 series potentiostats, the unit can be updated by the user by downloading the firmware, so following present and future features and developments of AMEL instruments.

The units driven by the 7800 interface are keeping the ability to be coupled with the 7200 FRA and the powerful Zassist software to perform accurate EIS measures with autoranging feature added. Open the door to the new world and update now!



16 BIT INTERFACE AND FUNCTION GENERATOR FOR 2000 SERIES POTENTIOSTATS AMEL MODEL 7800

Compatible models	AMEL 2049, 2051, 2053, 2055, 2059 and some manual potentiostats with I/V + Pol IN analog interface
Remote commands (with AMEL potentiostats)	Cell on, Pstat/Gstat, current scale,
Analog inputs	
From potentiostat	I input V input
Voltage range	+/- 10 V DC+pkAC
Input impedance	> 5 KOhm
Other sources	1 auxiliary voltage in 1 PT1000 temperature probe
Voltage range (auxiliary voltage)	+/- 10 V DC+pkAC
Input impedance (auxiliary voltage)	> 5 KOhm (10 ¹² Ohm differential inputs opt 01)
Analog output	
Range	+/- 10 V DC+pkAC
Output impedance	100 Ohm
Function generator	
Waveforms	Constant, ramp, triangle, pulsed, with diff. Pulse or not
Modulation voltage range	+/- 10 V , 2.5 V , 250 mV
Resolution	400 uV , 100 uV , 10 uV
Minimum time step	10 msec standard mode
Max ramp speed	10 V /s standard
Polarisation capabilities	
Voltage	+/- 10 V DC+pkAC (equivalent to +/- full scale in Gstat)
voltage resolution	400 uV
Output bandwidth	> 20 MHz
Measure performances	
Uncompensated DC & AC accuracy	1 % DC up to 1 Gohm 5 % AC up to 500 KHz 100 pF
Compensated DC & AC accuracy	0.2 % DC up to 20 Gohm 1 % AC up to 1 MHz / 10 pF
Max. impedance range(compensated)	Up to 5x10 ¹¹ ohm // 10 pF 1 MHz with 5 % modulus, 10° phase accuracy at cable end
Meters and interfaces	
Vector voltmeter	Through the 7200 FRA unit
Temperature meter	-200 + 200 C° with PT1000 probes 0.1C° resolution 0.2C° accuracy 0-1200 type N thermocouple (optional)
Sampling rate	FRA : frequency dependent Temperature 1/sec max
Digital interface	USB and RS 232 with full instrument control and output for the 7200 FRA control
Power supply and size	
Voltage mains	115 / 230 V ranges (+/- 10%)
Power consumption	20 VA max
Size & weight	400 x 430 x 90 mm (L x W x H) Kg 3 (rackmount brackets excluded)