

# Simcenter™ Micred™ Power Tester 1800A 12C 12V

## Simcenter™ Micred™ Power Tester 3600A 12C 6V

### Technical Specifications

External Power Requirements	
Japan / USA	190-220 VAC 3P+PE 50/60 Hz, Max. 100 A <sup>1</sup> / 111 A <sup>2</sup> RCD Current: 30 mA
Worldwide	380-415 VAC 3P+N+PE 50/60 Hz, Max. 52 A <sup>1</sup> / 57 A <sup>2</sup> RCD Current: 30 mA

<sup>1</sup>Only in the case of Simcenter Micred Power Tester 1800A 12C 12V

<sup>2</sup>Only in the case of Simcenter Micred Power Tester 3600A 12C 6V

External Thermostat Requirements	
Fluid Temperature Range	+5..+150°C
Ambient Temperature Range	+5..+30°C
Cooling Capacity During Calibration	50 W
Cooling Capacity During Heating	Based on DUT Power
Supported Models	Julabo Presto series Julabo High Tech series

Sensor Current Output Capabilities	
Min. I <sub>S</sub> Output per Channel	5 mA
Max. I <sub>S</sub> Output per Channel	1 A
I <sub>S</sub> <sup>***</sup> Programming Resolution	0.5 mA
I <sub>S</sub> <sup>***</sup> Programming Accuracy	0.5% set + 0.125% range

<sup>\*\*\*</sup>Sensor current

Powering Capabilities	
Max. Total Heating Current (combined channels)	1800 A <sup>1</sup> / 3600 A <sup>2</sup>
Number of Heating Channels	3
Max. Heating Current per Channel	600 A <sup>1</sup> / 1200 A <sup>2</sup>
Heating Current Resolution	500 mA
Heating Current Accuracy	0.1% set + 0.3% range
Switch-on Time	50 ms
Switch-off Time	100 μs
V <sub>CE</sub> <sup>*</sup> Voltage	0..12 V <sup>1</sup> / 0..6 V <sup>2</sup>
V <sub>GE</sub> <sup>**</sup> Voltage	-10V...+20V
V <sub>GE</sub> <sup>**</sup> Voltage Resolution	0.01 V
V <sub>GE</sub> <sup>**</sup> Voltage Accuracy	0.5% set + 0.25% range

<sup>1</sup>Only in the case of Simcenter Micred Power Tester 1800A 12C 12V

<sup>2</sup>Only in the case of Simcenter Micred Power Tester 3600A 12C 6V

<sup>\*</sup>Collector Emitter voltage

<sup>\*\*</sup>Gate Emitter voltage

Measurement Capabilities	
Input Channels for Transient Capturing	12 C (3x4)
Input Voltage Range	±12 V
Maximum Voltage Resolution	16 μV
Maximum Time Resolution	1 μs
Minimum Pulse Duration <sup>1</sup>	0.5 s
I <sub>G</sub> <sup>****</sup> Measurement	250 pA..100 μA
I <sub>G</sub> <sup>****</sup> Measurement Resolution	25 pA

<sup>1</sup>Only in the case of power cycling

<sup>\*\*\*\*</sup>Gate current

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General Specifications		
Control PC (part of the configuration)		<ul style="list-style-type: none"> <li>Intel Celeron 1.83GHz CPU</li> <li>4 GB RAM</li> <li>15.6" touchscreen</li> <li>80 GB SSD</li> <li>Interfaces: RS232, USB, Ethernet</li> <li>Embedded Windows 7 OS</li> </ul>
Physical Characteristics	Dimensions (L × W × H)	1630 mm × 980 mm × 1400 mm (shipping size, without crate) 1950 mm × 980 mm × 2040 mm (when fully set-up)
	Weight	Approx. 600 kg uncrated, 640 kg crated as shipped
Mechanical Specifications	Number of Cold Plates	2 ( <b>Note:</b> the left-hand side cold plate must be connected to a thermostat. It is possible to attach an external cold plate to the water system using T-valve.)
	Size of Cold Plates	400 mm × 300 mm
	Pipe Branch Size (Water)	G1/2" male threaded
	Pipe Branch Size (Thermostat)	G1/2" female threaded (M16 × 1 thread Julabo adapter included)
	Maximum Torque Allowed on the Connections of Pipe Branches	3 Nm
Environmental restrictions	Operating temperature range	0 °C .. +30 °C
	Operating relative humidity	30..90% (noncondensing)
	Storage temperature range	-30 °C ..+70 °C
	Storage relative humidity	10..95% (noncondensing)