




Simcenter POWERTESTER Comparison Table

Product	Simcenter POWERTESTER 1500A 3C/12C	Simcenter POWERTESTER 1800A 12C 12V	Simcenter POWERTESTER 3600A 12C 6V	Simcenter POWERTESTER 600A 16C 48V	Simcenter POWERTESTER 2400A 16C 12V
					
Heating Channels	3	3	3	2	4
Maximum output current	1500 A (3 x 500A)	1800A (3 x 600A)	3600A (3 x 1200A)	600A (2 x 300A)	2400A (4 x 600A)
Maximum output voltage	8V	12V	6V	48V	12V
Output Power	12 kW	21 kW	21 kW	29 kW	29 kW
Measurement positions	3 / 12 (3x4)**	12 (3x4)	12 (3x4)	16 (4x4)	16 (4x4)
Sense Current Sources	3	3	3	2	4
Auxiliary temperature sensor inputs [PT100/ Thermocouple/NTC]	3	3	3	16	16
Number of Devices with reference devices*	3 x 4, if 4 devices in series connected to the 3 power outlets (up to 8V max.)	3 x 4, if 4 devices in series connected to the 3 power outlets (up to 12V max.)	3 x 4, if 4 devices in series connected to the 3 power outlets (up to 6V max.)	2 x 8, if 8 devices in series connected to the 2 power outlets, or 1x 16 if connected in series to the combined power outlets (up to 48V max. in both cases)	4 x 4, if 4 devices in series connected to the 3 power outlets (up to 12V max.)
Automated k-factor calibration for thermal testing	3 Channel: 3 devices in parallel 12 Channel: 12 devices in parallel	12 devices in parallel	12 devices in parallel	16 devices in parallel	16 devices in parallel

Simcenter POWERTESTER Comparison Table

Product	Simcenter POWERTESTER 1500A 3C/12C	Simcenter POWERTESTER 1800A 12C 12V	Simcenter POWERTESTER 3600A 12C 6V	Simcenter POWERTESTER 600A 16C 48V	Simcenter POWERTESTER 2400A 16C 12V
Pulse current duration	0.5 sec to infinite, capable of continuous power output of 1500A	0.5 sec to infinite, capable of continuous power output of 1800A	0.5 sec to infinite, capable of continuous power output of 3600A	0.5 sec to infinite, capable of continuous power output of 600A	0.5 sec to infinite, capable of continuous power output of 2400A
Automated failure detection based on	UCE, ΔT_j , T_{jmax} , R_{th} increase				
Data recording	UCE before and after switching, ΔT_j , T_{jmax} , T_{jmin} , ΔP , $\Delta T_j/\Delta P$, structure functions, I_{gate}				
Gate driving voltage	-10V to +20V	-10V to +20V	-10V to +20V	-30V to +30V	-10V to +20V
Number of power testers possible to connect for single UI operation	1	1	1	8, creating a system with 128 measurement positions	1
Cooling Control/ Mechanical Features	2 cold-plates (30x40 cm) with DUT fixture, customer's own cold-plate or water jacket connection possible	2 cold-plates (30x40 cm) with DUT fixture, customer's own cold-plate or water jacket connection possible	2 cold-plates (30x40 cm) with DUT fixture, customer's own cold-plate or water jacket connection possible	External cooling. Protocol for external chiller and controls or other alternative custom/3rd party cooling solution implemented by the customer	External cooling. Protocol for external chiller and controls or other alternative custom/3rd party cooling solution implemented by the customer
Gate current measurement range and resolution	200 pA -100 μ A , 25 pA resolution				
Voltage measurement time base	max. 1 μ s (logarithmic/variable sampling)				
Safety Features	Autonomous system monitoring unit operated from UPS, smoke , coolant leakage, coolant temperature, switching module internal temperature, mains phase sensors, 4 color tower light with buzzer			Autonomous system monitoring unit operated from UPS, switching module internal temperature , mains phase sensors, connectors for smoke sensors, 4 color tower light with buzzer	

*at Maximum current, and assuming <3V voltage drop

** SW extension