

NEW PRODUCT

Multiple Cell Tester

RE II Series

SYSTEM WITH
36 CHANNELS
OF 300A



- Designed for all high current tests of single cells up to 6 volts
- 300A charge / discharge per test channel
- High accuracy of 0.02% FS
- Each **Six Pack™** power module contains up to six independent channels in a 19" chassis
- High packing density – up to 48 channels per cabinet
- Flexible configuration and paralleling of channels
- Exclusive **B.E.S.T.™** system: DC link & full grid regeneration
- Latest **SiC** technology: low cooling, low noise
- Integrated CAN interface to connect additional channels for data acquisition and control
- Suitable for deep discharge and abuse tests (negative voltage)



Simulated images. The images may reflect optional equipment and are subject to change without notice. Six Pack and Biconditional Energy Supply Tracking (B.E.S.T.) are pending trademarks of Digatron Power Electronics GmbH, Germany.

■ TECHNICAL DATA*

Multiple Cell Tester MCT 300-06-6 RE II

■ DC DATA

Test channels per Six Pack	6	
Paralleling of channels	yes	
Voltage range, V	0 ... +6 / -6 ... +6	
Continuous current per channel, A	300**	
DC output power, kW	9.2 (six pack) / 1.8 (channel)	
Accuracy U_{DC}	< $\pm 0.02\%$ FS***	
Accuracy I_{DC}	< $\pm 0.02\%$ FS***	
Second current range	-30 A ... +30 A	$\pm(15 \text{ mA} + 0.05\% \text{ of RD})$ ***
Current rise time (10 – 90% FS)	$\leq 3.8 \text{ ms}$ ****	
Data acquisition rate (DAR)	2.5 ms per channel	
Galvanic isolation per channel	yes	
Mechanical DC output contactors	yes	

■ AC DATA

Mains connection	400 – 480 V $\pm 10\%$, 50/60 Hz ± 3 Hz (3-phase)****	
Connected load per power module, kVA	12	
Power-factor	> 0.99	
THD, %	< 5	

■ COOLING AND ENVIRONMENTAL CONDITIONS

Cooling	air cooled, front to rear	
Ambient temperature, operating	5 – 40 °C (41 – 104 °F)	
Humidity	10% - 90% RH, non-condensing and non-corroding	

■ GENERAL DATA

Protection level	IP20	
Weight	approx. 47 kg (104 lb)	
Dimensions H x W x D	178 mm x 483 mm x 760 mm, (7" x 19" x 30")	

■ OPTIONS AND ACCESSORIES

Emergency shut-off safety relay	
Negative voltage range for deep discharge or abuse test e.g. UL 2271 7.7, UN38.3, SAND2017-6925	
Data loggers for additional inputs: voltage, temperature, analog, high impedance inputs for reference electrodes, I/O for auxiliary devices, RS-232, CAN interfaces, AD590	
BIND-Concept for synchronisation of multiple channels in one climate chamber	

■ AVAILABLE 19" CABINETS

HxWxD 1165 mm x 670 mm x 865 mm (45.8" x 26.3" x 34"), 21 U, for up to 2 power modules	
HxWxD 1965 mm x 670 mm x 865 mm (77.3" x 26.3" x 34"), 39 U, for up to 6 power modules	
HxWxD 2230 mm x 670 mm x 865 mm (87.8" x 26.3" x 34"), 45 U, for up to 8 power modules	
Colour	RAL 7016 anthracite grey

■ B.E.S.T. – BICONDITIONAL ENERGY SUPPLY TRACKING

Digatron's B.E.S.T. system ensures optimum energy efficiency under any operating condition. Innovative process that automatically balances the energy flows between the 6 channels and tracks the energy balance of the DC link accordingly, either to regenerate 100% in the DC realm (and top off from AC as needed), or to feed excess energy back to the 3-phase grid.

■ Silicon-Carbide MOSFET (SiC MOSFET)

These latest generation power devices give benefits of lower losses, higher voltage, and high temperature operation in the power conversion system, realizing its downsizing and high power density.

* Design and specifications are subject to change without notice. *Six Pack* and *Biconditional Energy Supply Tracking (B.E.S.T.)* are pending trademarks of Digatron Power Electronics GmbH, Germany.
** at max. 25° C (77° F) *** at 25° C (77° F) ± 5 K **** in short circuit at current change from 0% to 100% FS ***** Power reduced below 400 VAC supply



Unrivaled high power density



Six Pack rear view



Channel monitoring on portable device (optional)



CAN-DLT temperature logger for 16 additional thermocouples



CAN-DLS logger for additional voltage channels

Aachen, Germany

+49 241 168 090
+49 241 168 092199
info@digatron.de
www.digatron.de

Shelton, (CT), USA

+1 203 446 8000
+1 203 446 8015
info@digatron.com
www.digatron.com

Pune, India

+91 20 27464855
+91 20 27471682
cmo@adordigatron.com
www.adordigatron.com

Verona, Italy

+39 045 85 36 496
info@digatronsistemas.com
www.digatronsistemas.com

