

# Universal Battery Tester

## Regenerative Series

System with  
36 circuits of  
150A each



- Designed to test batteries from 0 – 20V
- Up to 150A charge / discharge per 1.8kW circuit
- Each **Six Pack™** contains up to six independent circuits in a 19" rack
- High packing density – a up to 48 circuits per cabinet
- Flexible configuration and paralleling of circuits
- 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
- 7" touch screen for circuit monitoring and status messages
- LAN connectivity with stationary or portable infrastructure



## TECHNICAL DATA\*

### Universal Battery Tester UBT 150-020-6 RE

#### DC DATA

Test circuits per Six Pack	6
Paralleling of circuits	yes
Voltage range, V	0 – 20
Continuous current per circuit, A	150
Max. power, kW	9.2 (Six Pack) / 1.8 (circuit)
Accuracy $U_{DC}$	$< \pm 0.05\%$ FSR
Accuracy $I_{DC}$	$< \pm 0.1\%$ FSR
Current rise time (10 – 90%)	$\leq 5$ ms
Data Acquisition Rate (DAR)	2.5ms per circuit
Galvanic isolation per circuit	yes

#### AC DATA

Mains connection	208*** – 480V +5%/-10%, 50 – 60Hz $\pm 3$ Hz (3-phase)
Connected load per Power Module, kVA	12
Rated power-factor	$> 0.99$
THD, %	$< 5$

#### COOLING, 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. 50kg (110lb)
Dimensions H x W x D	178 mm x 483 mm x 760 mm, (7" x 19" x 30")

#### OPTIONS & ACCESSORIES

Emergency shut-off safety relay	
Additional mechanical DC output contactors	
Negative voltage range for reverse charge abuse test (UL 2271 7.7)	
Data loggers for additional inputs: voltage, temperature, analog, high impedance inputs for reference electrodes, I/O for auxiliary devices, RS-232, CAN interfaces	
BIND-Concept for synchronisation of multiple circuits in one climate chamber	

#### AVAILABLE 19" CABINETS

HxWxD 1165mm x 670mm x 865mm (45.8" x 26.3" x 34"), 21U, for up to 2 Power Modules	
HxWxD 1965mm x 670mm x 865mm (77.3" x 26.3" x 34"), 39U, for up to 6 Power Modules	
HxWxD 2230mm x 670mm x 865mm (87.8" x 26.3" x 34"), 45U, 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 circuits 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 next 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 25°C  $\pm 5$ K \*\*\* Power reduced below 380VAC supply



Unrivaled High Power Density



Six Pack Rear View



Circuit Monitoring on Portable Device (optional)



CAN-DLT Temperature Logger for 16 additional thermocouples



CAN-DLS Logger for additional voltage channels

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