



POWER HARDWARE IN THE LOOP TEST & EMULATION PLATFORM



We amplify your success



MARINE



ACADEMIC RESEARCH



RENEWABLE ENERGY



AEROSPACE



E-MOBILITY



GRID



TESTING



PHIL

DIGITAL POWER TWIN

The most versatile platform for emulation and testing



Modular System

Galvanically isolated from 10 kVA up to 4500 kVA
Series and parallel operation of systems



Ultra-high Bandwidth

DC to 5 kHz at full power with CSU system
DC to 50 kHz at full power with UHPS system



4-Quadrant Operation

Seamless transition between source & load
Regenerative up to full power



Fast Response Time

Fiber optic interface to EGSTON apps
and external HIL systems

SAVE TIME & MONEY

- Reduce development time
- Regenerate power
- Test power interfaces
- Analyze fault scenarios
- Model and validate control algorithms

PRODUCT MATRIX

	UHPS	CSU100	CSU 200	CSU 200 2CH	CSU 250	CSU 750
Modes	AC & DC	AC & DC	AC & DC	AC & DC	DC	DC
Output power	10 kW	100 kW	200 kW	2 x 100 kW (200kW)	250 kW	750 kW
Scaleable up to	60 kW	600 kW	1200 kW	1200 kW	1500 kW	4500 kW
Max AC voltage	353,5 Vrms in 1-Phase (707 Vrms in series 1-Phase)	565 Vrms in 1-Phase (1000 Vrms in 1-Phase series)	565 Vrms in 1-Phase (1000 Vrms in 1-Phase series)	565 Vrms in 1-Phase (1000 Vrms in 1-Phase series)	–	–
Max AC current	28,5 Arms	360 Arms	360 Arms	480 Arms	–	–
Max DC voltage	500 V (1000 V)	820 V (1500 V)	820 V (1500 V)	1500 V (3000 V)	820 V (1500 V)	820 V (1500 V)
Max DC current	40 A	840 A	840 A	1120 A	1120 A	1120 A
Bandwidth	50 kHz Large Signal	5 kHz Large Signal	5 kHz Large Signal	5 kHz Large Signal	Harmonics up to 15 kHz	Harmonics up to 15 kHz

Power Hardware-in-the-loop

Grid Emulator

Machine Emulator

AC/DC Source/Sink

Certification

Testing

Impedance Spectroscopy

RLC Load

All-in-one Emulator

USE CASES



PLAY VIDEOS



Typhoon HIL

Get in touch for a free Live-Demo!
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