

WOCEN POWER

WB3000

High-frequency bidirectional DC test power supplies

A regenerative DC source for EV motors, motor controllers, powertrains, DC charging equipment and energy-storage converters. SiC power devices combine battery simulation, DC programming, electronic load operation and battery charging/discharging.



Complete model selection

Model	Voltage	Current	Power	W × H × D (mm)
WB3100-1200-300	12-1200 V	300 A	100 kW	900 × 2000 × 1080
WB3200-1200-600	12-1200 V	600 A	200 kW	900 × 2000 × 1080
WB3300-1200-900	12-1200 V	900 A	300 kW	900 × 2000 × 1080
WB3400-1200-1200	12-1200 V	1200 A	400 kW	1400 × 2000 × 1080
WB3500-1200-1200	12-1200 V	1200 A	500 kW	1400 × 2000 × 1080
WB3600-1200-1200	12-1200 V	1200 A	600 kW	1400 × 2000 × 1080

Electrical performance

Parameter	Specification
Voltage / current accuracy	±0.05% FS / ±0.05% FS
Response / switching time	2 ms / 4 ms
Voltage / current slew rate	200 V/ms / 300 A/ms
Voltage / current ripple	≤0.1% FS / ≤0.1% FS
AC input	3-phase 3-wire; 380 V ±15%; 47-63 Hz
Power factor / current distortion	≥0.99 / ≤3%
Efficiency	>95.5% (series feature claim)

Programming and system integration

CV, CC, CP and CR modes; five built-in battery chemistries and five user-defined curves. Configure series/parallel cell counts and initial SOC, store I-V curves and program voltage against time. Parallel operation supports higher-power test installations.

Interfaces, options and installation

RS485 standard; CAN and Ethernet optional. Options include load-end PDU, PDSB discharge protection, capacitor cabinet and online insulation monitoring. IP21 indoor enclosure, forced-air cooling, -10 to 40°C, 10-90% RH without condensation; altitude ≤2000 m.

WOCEN POWER

EVWS / EVWB / EVWBT

Battery simulators and dual-channel DC test supplies

EVWS/EVWB combines programmable DC output and regenerative energy flow for automotive test benches. EVWBT provides two independently adjustable DC outputs for loads at different voltage levels and internal energy circulation.



High-voltage model selection

EVWS/B model suffix*	Rated / peak power	Rated / peak current	Output
050-1000	50 / 75 kW	±200 / ±300 A	24-1000 V
080-1000	80 / 120 kW	±300 / ±450 A	24-1000 V
160-1000	160 / 208 kW	±500 / ±650 A	24-1000 V
200-1000	200 / 260 kW	±500 / ±650 A	24-1000 V
250-1000	250 / 325 kW	±600 / ±780 A	24-1000 V
300-1000	300 / 390 kW	±600 / ±780 A	24-1000 V
400-1000	400 / 520 kW	±800 / ±1040 A	24-1000 V
500-1000	500 / 650 kW	±1000 / ±1300 A	24-1000 V

Model naming and dual-channel selection

*Prefix the suffix with EVWS/B- as listed in the source (for example EVWS/B-050-1000). EVWBT uses the same listed suffixes, rated/peak power and current values. Confirm the required per-channel configuration when ordering. Optional voltage ranges: 24-800 V or 24-1200 V; current and peak power can be customized.

EVWBT operating characteristics

Parameter	Specification
Modes / response	CV, CC, CP / ≤3 ms (10-90% loading)
Output accuracy / ripple	≤±0.1% FS / ≤0.2% FS Vrms
Switching time	≤6 ms (+90% to -90%)
AC input	380 V ±10%; 3-phase 3-wire + PE; 50 Hz ±5 Hz
Power factor / harmonic content	≥0.99 / ≤3%
Efficiency / regeneration	>93%; supports full-scale power feedback
Control / installation	7-inch touchscreen; RS485, CAN, LAN; IP21

48 V battery simulator alternatives

Model	Voltage	Rated / peak power	Rated / peak current
EVWB-018-060	10-60 V	18 / 25 kW	±360 / ±500 A
EVWB-030-120	10-120 V	30 / 39 kW	±600 / ±780 A
EVWB-050-200	10-200 V	50 / 65 kW	±800 / ±1040 A

Battery simulation and applications

EVWS/EVWB provides five built-in chemistries, configurable series/parallel counts, SOC and I-V curve preview/storage. The 48 V models list a 60 s peak duration. Typical applications include EV motor, controller, powertrain, DC-DC and hybrid generator testing.

WOCEN POWER

HB SERIES

Bidirectional programmable rack DC supplies

A source and regenerative load in a 3U chassis, with auto-ranging constant-power output and feed capability.



Complete model selection - all listed models are 3U

Model	Voltage	Current	Power
HB-005-100-170	100 V	170 A	5 kW
HB-010-100-340	100 V	340 A	10 kW
HB-015-100-510	100 V	510 A	15 kW
HB-007-330-75	330 V	75 A	7 kW
HB-014-330-150	330 V	150 A	14 kW
HB-021-330-225	330 V	225 A	21 kW
HB-005-500-40	500 V	40 A	5 kW
HB-010-500-80	500 V	80 A	10 kW
HB-015-500-120	500 V	120 A	15 kW
HB-007-500-40	500 V	40 A	7 kW
HB-014-500-80	500 V	80 A	14 kW
HB-021-500-120	500 V	120 A	21 kW
HB-007-750-25	750 V	25 A	7 kW
HB-014-750-50	750 V	50 A	14 kW
HB-021-750-75	750 V	75 A	21 kW
HB-010-1000-40	1000 V	40 A	10 kW
HB-014-1000-40	1000 V	40 A	14 kW
HB-021-1000-75	1000 V	75 A	21 kW
HB-015-1500-40	1500 V	40 A	15 kW
HB-021-1500-40	1500 V	40 A	21 kW
HB-030-1500-80	1500 V	80 A	30 kW

Rack-system performance

Parameter	Specification
AC input	3-phase 3-wire + PE; 380/400/480 V; -10/+15%; 45-65 Hz
Voltage / current accuracy	$\leq 0.1\%$ U_{max} / $\leq 0.2\%$ I_{max}
Transient recovery / ripple	< 1.5 ms / $< 0.03\%$ V_{max} (parameter table)
Display / parallel operation	4.3-inch colour LCD; up to 10 master/slave units
Operating environment	0-40°C; $< 80\%$ RH, without condensation

Waveforms, battery models and PV testing

Triangular, rectangular, trapezoidal, sine and step waveforms can be applied to voltage or current. Battery simulation supports chemistry, series/parallel cells and SOC. WOCEN POWER CONTROL supports I-V curve simulation and static/dynamic MPPT testing under the catalog's EN50530/SANDIA reference.

Control and protection

Standard RS485/232, CAN and LAN; MODBUS-RTU, CAN2.0B and MODBUS-TCP. Includes remote voltage compensation and programmable protection for AC input, DC bus, temperature, output voltage/current and compensation faults.

WOCEN POWER

MP SERIES

Auto-ranging programmable DC test supplies

Programmable DC sources for laboratories, production lines, test benches and ATE integration.



Complete source model list

Model	Voltage	Current	Power	Height
MP-001.5-80	80 V	60 A	1.5 kW	2U
MP-003-80	80 V	120 A	3 kW	2U
MP-001.5-750	750 V	6 A	1.5 kW	2U
MP-003-750	750 V	12 A	3 kW	2U
MP-003-1500	1500 V	6 A	3 kW	2U
MP-005-80	80 V	170 A	5 kW	3U
MP-010-80	80 V	340 A	10 kW	3U
MP-015-80	80 V	510 A	15 kW	3U
MP-005-200	200 V	70 A	5 kW	3U
MP-010-200	200 V	140 A	10 kW	3U
MP-015-200	200 V	210 A	15 kW	3U
MP-005-360	360 V	40 A	5 kW	3U
MP-010-360	360 V	80 A	10 kW	3U
MP-015-360	360 V	120 A	15 kW	3U
MP-005-500	500 V	30 A	5 kW	3U
MP-010-500	500 V	60 A	10 kW	3U
MP-015-500	500 V	90 A	15 kW	3U
MP-005-750	750 V	20 A	5 kW	3U
MP-010-750	750 V	40 A	10 kW	3U
MP-015-750	750 V	60 A	15 kW	3U
MP-010-1000	1000 V	30 A	10 kW	3U
MP-015-1000	1000 V	40 A	15 kW	3U
MP-015-1500	1500 V	30 A	15 kW	3U
MP-015-1500	1500 V	40 A	15 kW	3U
MP-015-2250	2250 V	25 A	15 kW	3U

Model confirmation

The manufacturer table lists MP-015-1500 twice, with 30 A and 40 A ratings. Specify the required current and confirm the exact variant before ordering. Voltage, current and power limits are separate ratings; maximum voltage and current are not necessarily available simultaneously.

Performance and expansion

Parameter	Specification
Programming / measurement accuracy	Voltage $\leq 0.1\%$ Umax; current $\leq 0.2\%$ Imax
Load response / rise time	≤ 2 ms / 30 ms (10-90%)
Parallel capacity	Up to 10 units; series features list 150 kW and 5100 A
Control	CAN, RS485/232, LAN; USB and analog options
Protection / cooling	OVP adjustable to 110% Umax; temperature-controlled air cooling

Waveform programming and monitoring

Built-in arbitrary waveforms plus WOCEN POWER CONTROL for multi-device monitoring, start/stop, protection settings, 100-step waveform editing and data storage. Optional internal/external discharge module, up to 5 kW as listed in the series features.

WOCEN POWER

GP / WP SERIES

Regulated DC sources from bench to high power

DC supplies for motor and power-tool testing, automotive electronics, LEDs, laboratory systems and industrial production. Compact GP units provide programmable output; larger GP/WP cabinets support higher-power test benches.



Compact GP selection - 2U, 446 × 87 × 380 mm

Model	Voltage	Current	Power
GP-36100	36 V	100 A	3 kW
GP-3650	36 V	50 A	1.5 kW
GP-6060	60 V	60 A	3 kW
GP-6030	60 V	30 A	1.5 kW
GP-12030	120 V	30 A	3 kW
GP-12015	120 V	15 A	1.5 kW
GP-30012	300 V	12 A	3 kW
GP-3006	300 V	6 A	1.5 kW
GP-4008	400 V	8 A	3 kW
GP-4004	400 V	4 A	1.5 kW

Compact GP characteristics

Parameter	Specification
Input / display	Single-phase 220 V ±22 V, 47-63 Hz; 4.3-inch LCD
Voltage / current accuracy	≤0.1% Umax / ≤0.2% Imax
Response / efficiency	≤5 ms; ≥85%
Interfaces	RS485/RS232, LAN, CAN; USB / analog optional

Representative high-power GP models

Model	Voltage	Current	Power
GP-010-60	60 V	200 A	10 kW
GP-015-120	120 V	150 A	15 kW
GP-030-400	400 V	100 A	30 kW
GP-060-800	800 V	80 A	60 kW
GP-080-800	800 V	200 A	80 kW
GP-160-800	800 V	400 A	160 kW
GP-250-800	800 V	600 A	250 kW
GP-300-800	800 V	600 A	300 kW

High-power operation and EVWP discharge option

GP/WP (10-400 kW family heading) lists ≤0.5% FS output accuracy, ≤10 ms response, 380 V ±10% input and IP20 enclosure. RS485 standard; RS232/Ethernet optional. EVWP 30/60 kW variants add a discharge device rated at 10% of source power; confirm voltage/current configuration for the application.

WOCEN POWER

BP6 / BP7 SERIES

Programmable AC variable-frequency supplies

Single- and three-phase AC sources for appliance, motor and electrical-product testing. BP7 adds step, gradient and ladder programming plus harmonic waveforms and multiple output configurations.



Single-phase model selection

BP6 model	BP7 model	Power	Current low / high
BP6605	-	0.5 kVA	4.5 / 2.25 A
BP6001	-	1 kVA	9 / 4.5 A
BP6002	-	2 kVA	18 / 9 A
BP6003	-	3 kVA	27 / 13.5 A
BP6005	-	5 kVA	45 / 22.5 A
BP6010	BP7010	10 kVA	90 / 45 A
BP6015	BP7015	15 kVA	136 / 68 A
BP6020	BP7020	20 kVA	182 / 91 A
BP6030	BP7030	30 kVA	272 / 136 A
BP6045	BP7045	45 kVA	408 / 204 A
BP6060	BP7060	60 kVA	544 / 272 A

Three-phase model selection

BP6 model	BP7 model	Power	Current low / high
BP6315	BP7315	15 kVA	45 / 22.5 A
BP6330	BP7330	30 kVA	90 / 45 A
BP6345	BP7345	45 kVA	136 / 68 A
BP6360	BP7360	60 kVA	182 / 91 A
BP6390	BP7390	90 kVA	272 / 136 A
BP63120	BP73120	120 kVA	362 / 181 A
BP63150	BP73150	150 kVA	454 / 227 A
BP63180	BP73180	180 kVA	545 / 272 A
-	BP73240	240 kVA	724 / 362 A
-	BP73300	300 kVA	908 / 454 A

AC output and programming

Parameter	Specification
Voltage ranges	0-150 / 0-300 V phase; up to 520 V line (3-phase)
Frequency	BP6: 40-70 Hz; BP7 also lists 100/120/200/240 Hz fixed points
Voltage error / recovery	±(0.2% reading + 0.2% FS); ≤20 ms
Distortion	<1% at 220/110 V ±15%, resistive load
Control	RS232 standard; RS485 / network optional

Test functions

BP7 three-phase models support standard, parallel single-phase, American two-phase, independent and unbalanced modes, with 30 harmonic waveforms. BP6 three-phase programming supports 50 voltage/frequency groups and 60,000 cycles. BP6/BP7 three-phase overload reaches 200-300% for 2 s; BP6 single-phase overload limits differ.

WOCEN POWER

BPA / AP SERIES

High-power AC testing and shore power

BPA provides modular AC power for industrial charging equipment, central air-conditioning, compressors and motors. AP provides shore-based power for ports, shipbuilding, offshore platforms and large lifting machinery.



BPA industrial AC selection

Model	Rated power	Current	W × H × D (mm)
BPA-300	300 kVA	435 A	1700 × 1900 × 1050
BPA-400	400 kVA	579 A	2300 × 2000 × 1050
BPA-600	600 kVA	869 A	3200 × 1900 × 1050
BPA-800	800 kVA	1159 A	4500 × 1900 × 1200
BPA-1000	1000 kVA	1450 A	5000 × 1900 × 1200
BPA-1200	1200 kVA	1739 A	6500 × 1900 × 1200

BPA output and architecture

Listed models provide 0-300 V phase and 0-520 V line output. Digital closed-loop control, fibre-optic connection and modular construction support maintenance and high load capacity. The catalog describes technical capability up to 3000 kVA; configurations beyond the listed table require confirmation.

AP shore-power selection

Model	Rated / peak power	Rated / peak current
AP-200	200 / 300 kW	240 / 360 A
AP-400	400 / 600 kW	480 / 720 A
AP-600	600 / 900 kW	720 / 1080 A
AP-800	800 / 1200 kW	960 / 1440 A
AP-1000	1000 / 1500 kW	1200 / 1800 A
AP-1600	1600 / 2400 kW	1900 / 2850 A
AP-2000	2000 / 3000 kW	2400 / 3600 A
AP-2500	2500 / 3750 kW	3000 / 4500 A
AP-3000	3000 / 4500 kW	3600 / 5400 A

AP deployment and accessories

DSP control and line-voltage compensation support distant loads. Parallel modules allow fault-module withdrawal and partial-module operation under light load. Containers, cable-handling equipment and trolleys can be configured. The source describes input 6-10 kV / 50 Hz or 380 V / 50 Hz and output 440 V / 60 Hz; final site electrical requirements must be confirmed.

Protection and application planning

BPA includes short circuit, overcurrent, overheating, overload, undervoltage, overvoltage and phase-loss protection. AP is intended for high humidity, corrosion and impact loads. Specify installation environment, continuous/peak demand, input grid, output frequency and cable distance for project selection.

WOCEN POWER

EVWR / WBTS SERIES

Regenerative loads and battery PACK test systems

EVWR supports fuel-cell engines, DC-DC converters and charging-equipment endurance testing.



Representative EVWR model selection

Model	Voltage	Current	Power
EVWR-060-600-600	10-600 V	600 A	60 kW
EVWR-060-1000-1000	10-1000 V	1000 A	60 kW
EVWR-080-800-800	10-800 V	800 A	80 kW
EVWR-100-1000-1000	10-1000 V	1000 A	100 kW
EVWR-120-800-600	10-800 V	600 A	120 kW
EVWR-150-1000-800	10-1000 V	800 A	150 kW
EVWR-200-1000-1000	10-1000 V	1000 A	200 kW
EVWR-250-1000-1000	10-1000 V	1000 A	250 kW

EVWR performance

Parameter	Specification
Modes	Source: CV/CC/CP; load: CC/CR/CV/CP
Accuracy / resolution	Voltage $\leq \pm 0.05\%$ FS, 0.01 V; current $\leq \pm 0.1\%$ FS, 0.01 A
Response / efficiency	≤ 10 ms (10-90% loading); $\geq 93\%$
AC grid / interfaces	380 V $\pm 10\%$, 50 Hz ± 5 Hz; RS485/CAN; LAN optional
Regeneration	Full-power feedback; PF ≥ 0.99 ; current distortion $< 3\%$

WBTS model selection - standard 24-1000 V

Model	Power	Charge / discharge current
WBTS-050-1000	50 kW	± 200 A
WBTS-080-1000	80 kW	± 300 A
WBTS-160-1000	160 kW	± 500 A
WBTS-200-1000	200 kW	± 500 A
WBTS-250-1000	250 kW	± 600 A
WBTS-300-1000	300 kW	± 600 A
WBTS-400-1000	400 kW	± 800 A
WBTS-500-1000	500 kW	± 1000 A

WBTS performance and recording

Parameter	Specification
Voltage / current accuracy	$\pm 0.05\%$ FS / $\pm 0.05\%$ FS
Sampling / response / conversion	16-bit A/D; ≤ 10 ms response; ≤ 20 ms conversion
Modes	CC/CV/CP/CCCV charge; CC/CP/CR/CV discharge
Cycle programming	1-65,535 cycles; 254 steps per loop; 3 nesting levels
Data and control	MySQL; TCP/IP; Excel/TXT/charts; RS485/LAN/CAN
Installation	IP21; forced air; -10 to 45°C; $< 90\%$ RH, non-condensing

Battery testing and integration

Capacity, cycle life, rate capability, HPPC, efficiency, DC internal resistance and road-condition simulation. User-supplied CAN DBC supports BMS integration; combine with temperature chambers, vibration systems and voltage/temperature acquisition. Independent channels can be paralleled. Optional ranges include 24-800 V, 24-1200 V and 48-1500 V; channels and power can be customized.