

Specifications

BCL9600

Battery Enclosure

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|-------------------------|--|
| Number of Battery Units | Up to 4 x 19" Rack Mountable Battery Packs |
| Storage Capacity | Up to 9.6kWh (4 x 2.4kWh Pylon Tech Batteries) |
| Battery Voltage | 48V DC Nominal / 60V DC Maximum |
| Battery Chemistry | Lithium-ion with BMS |
| Access Type | Removable front Panels |

Cable Specification

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| Battery Cable Rating | 4 x 65A |
| Battery Cable Type | 8 AWG (8.36mm ²) |
| Battery Cable Termination (Battery Enclosure) | Surlok Amphenol Connector |
| Battery Cable Termination (Inverter) | Amphenol H4 (65A) |
| BMS Cable Type | Depends on Battery Type |
| BMS Cable Termination | Refer to Battery Enclosure Installation Manual |

Ventilation Specification

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|-------------------------------|---|
| Ventilation Type | Passive and Active Cooling |
| Ventilation Control | Smart Temperature Control |
| Number of Fans | 2 |
| Fan Power | 48V DC / 0.13A Per Fan |
| Fan Activation Temperature | Variable Depending on Charge/Discharge |
| Incoming Ventilation Aperture | 288cm ² with Washable Filter |
| Outgoing Ventilation Aperture | 288cm ² with Washable Filter |
| Passive Airflow Rate | 30cm ³ /min |
| Active Airflow Rate | 320cm ³ /min |

General Data

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| External Dimension (W x H x D) | W 516mm x H 1205mm x D 280mm (with Feet) |
| Mounting and Weight - Empty | 32kg Rear Fixing |
| Mounting and Weight - with Batteries | 130kg Typical |
| Ambient Temperature Range | Based on Battery Specification |
| Environmental Protection Rating | IP54 - Protected From Rain, Splashing and Spraying |
| Noise Emissions | Less than 25dB |
| Warranty | 5 Years |
| Construction | Powder Coated Steel Chassis |
| Finish | Sealed, Powder Coated front Covers and Chassis |
| Supply | Ships Pre-assembled |
| Maintenance | Externally Serviceable Dust Filters |

Technical Data

GW5048-ESA

Battery Input Data

| | | | |
|--------------------------------|---|--------------------------------------|---------------------------|
| Battery Type | Li-Ion | Nominal Output Frequency (Hz) | 50/60 (±0.2%) |
| Nominal Battery Voltage (V) | 48 | Output THDv (@Linear Load) | <3% |
| Battery Voltage Range(V) | 40~60 | Back-up loads AC disconnect | Integrated 2 pole 25A MCB |
| Maximum charging power (W) | 4600 | Manual back-up load AC bypass switch | Integrated |
| Maximum discharge power (W) | 4600 | Efficiency | |
| Maximum charging current(A) | 85 | Max. Efficiency | 97.6% |
| Maximum discharging current(A) | 100 | European averaged efficiency | 97.0% |
| Battery charging method | Self-adaption to BMS | Max. Battery to Load Efficiency | 94.0% |
| Battery disconnect | Integrated 2 pole DC breaker 125A DC per pole | Protection | |

PV String Input Data

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|--------------------------------|------------|---|------------|
| Max. DC Input Power (W) | 6500 | Anti-islanding Protection | Integrated |
| Max. DC Input Voltage (V) | 580 | PV String Input Reverse Polarity Protection | Integrated |
| MPPT Range (V) | 125~550 | Insulation Resistor Detection | Integrated |
| Start-up Voltage (V) | 150 | Residual Current Monitoring Unit | Integrated |
| Nominal DC Input Voltage (V) | 360 | Output Over Current Protection | Integrated |
| Max. Input Current (A) | 11/11 | Output Short Protection | Integrated |
| Max. Short Current (A) | 13.8/13.8 | Output Over Voltage Protection | Integrated |
| No. of MPP Trackers | 2 | General Data | |
| No. of Strings per MPP Tracker | 1 | Operating Temperature Range (°C) | -25~60 |
| Solar array switch | Integrated | Relative Humidity | 0~95% |
| | | Operating Altitude (m) | 3000 |

AC Output Data (On-grid)

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|--|---|------------------------------|-------------------------------------|
| Max. Apparent Power Output to Utility Grid (VA)* | 4600/5100 | Cooling | Nature Convection |
| Max. Apparent Power from Utility Grid (VA) | 9200 | Noise (dB) | <25 |
| Nominal Output Voltage (V) | 230 | User Interface | LED & APP |
| Nominal Output Frequency (Hz) | 50/60 | Communication with BMS | CAN |
| Max. AC Current Output to Utility Grid (A) | 22.8 | Communication with Meter | RS485 |
| Max. AC Current From Utility Grid (A) | 40 | Communication with Portal | Wi-Fi |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | Weight (kg) | Inverter 32kg, BoS 12kg, total 44kg |
| Output THDi (@Nominal Output) | <3% | Size (Width*Height*Depth mm) | 516 x 832 x 290 |
| Grid disconnect | Integrated 2 pole 40A MCB | Mounting | Wall Bracket |
| | | Protection Degree | IP65 |

AC Output Data (Back-up)

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|------------------------------------|---------------------------|---------------------------------------|---|
| Nominal Output Apparent Power (VA) | 4600 | Standby Self-Consumption (W) | <13 |
| Nominal Output Current (A) | 20 | Topology | Battery High Frequency Isolation/Solar Transformerless |
| Peak Output Apparent Power (VA)** | 6900 (10 seconds maximum) | Certifications & Standards | |
| Nominal Output Voltage (V) | 230 (±2%) | Grid Regulation | CEI 0-21;VDE4105-AR-N |
| | | Safety Regulation | IEC/EN62109-1&2, IEC62040-1 |
| | | EMC | EN61000-6-4,EN 61000-4-16, EN 61000-4-18, EN 61000-4-29 |

*:4600VA for VDE-AR-N4105,5100VA for other country

**:. Can be reached only if PV and battery power is enough