

Datasheet

TheBattery™ Mobile - BMW Certified Solution

Technical Specifications

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| Battery type | Multiple BMW-i3 42.2 kWh batteries using Li-ion NMC chemistry |
| Connection | Grid, Generator*, PV/Solar, no grid |
| Power Conversion System | One or multiple Energy Storage Inverters (ESI) of max. 300 kVA each (under optimum grid and temperature conditions). Features: modularity, redundancy, high efficiency, wide range, minimal low-load losses; reduction by smart control switching off unused inverters. |
| Energy Storage Inverter Efficiency | 97,2% max. |
| Required Minimum Input Connection | 3P +N 63A 230/400Vac; compliant with EN 50160:2010 |
| Output Voltage | 3P + N 230/400Vac |
| Earthing | From grid connection or external earthing pin |
| Output Frequency | 50 Hz; compliant with EN 50160:2010 |
| System Controller and Communication | Combination of a high-end industrial controller with the RTU developed by Alfen. Various communication channels possible: local HMI, Modbus TCP/IP and Alfen's TheBatteryConnect back office platform for remote monitoring and control. Platform offers flexible and open-standard interfacing to the customer's Energy Management System. |
| Operational Modes of System Controller | Off-grid, Peak shaving, Energy trading (P/Q Control), Secondary Reserve, Frequency Response Service (installation of external energy meter required), Black start (depending on availability of auxiliary power). Combination of black start with internal auxiliary power feed is a custom made option. |
| Operating Temperature Range | -20°C to + 40°C Optional: temperature range extension (-40°C) |
| Climatization | Batteries and inverters air-conditioner cooled Optional: batteries refrigerant cooled |
| Standards | NEN3140, ISO9001, ISO14001, ISO 27001, Low Voltage Directive 2014/35/ EU, EMC directive 2014/30/EU, Batteries directive 2006/66/EU, HD IEC 60364: 2005, NEN 1010: 2015, IEC 61439-2: 2011, EN 61000-6-2:2005, EN 61000-6-4:2007+A1:2011, IEC 62619: 2017, IEC 60947, IEC 61439, IEC 62271-100, IEC 62271-102, IEC 62271-103, IEC 62271-200, Road and sea transport ADR class 9, UN 3536, UN 3481 (Lithium-ion Batteries in equipment) |

NOTE

Other system configurations upon request.
Subject to misprints, errors and technical modifications.
Values based on standard test conditions.
* Alignment with Alfen NV required.

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|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Noise level | Max. 55.5 dB(A) at 10 meter (20°C ambient temperature) depending on positioning |
| Warranties | 2 year product warranty |
| Operation & Maintenance | Various Service Level Agreements available (Bronze, Silver, Gold, Platinum) |
| Type of enclosure | Containerized integrated solution |
| IP-value of enclosure | IP54 |
| Container type | 10ft |
| Dimensions (l x w x h) | 2.99m x 2.44m x 2.59m |
| Connection to power supply and load | Integrated, externally accessible Low Voltage distribution panel with 2x three phase 400A Powerlock connectors |
| System battery capacity | 422 kWh; larger systems are possible with Alfen's modular, integrated, multiple container solution |
| System weight | 6.700 kg |

NOTE

Above is an indication of the different sized systems which are possible with Alfen's TheBattery. Being a fully modular system however, the sizing of any given system can be subject to change due to the specific requirements of the project in question.

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