

gridtogo™ INGENIUM MX 9/20

Features:

- 400/230V 50Hz 3Ø output, 9kVA
- GSM Remote monitoring
- Maintenance free battery (Lead or Lithium)
- 20kWh stored energy (option up to 60kWh)
- Full system DC isolator with pre-charge
- 50A pass-through capacity
- · 50A Auto full system bypass
- Integrated smart Solar PV storage capability
- Advanced EMS with smart device control
- V50 Power[™] for enhanced DC bus stability



Unit shown with optional road tow trailer.

3Ø or 1Ø 400/230V







3Ø 400/230V out

General Description

gridtogo™ INGENIUM is a universal Energy Storage System (ESS) ideally suited to a range of applications, delivering reliable power in the most cost effective and environmentally sensitive way. Energy stored within the unit is converted electronically into AC mains voltage. Power can be derived from solar PV, connection to an external gird supply or from a diesel generator or wind turbine. Energy is automatically managed from any or all of these energy sources to ensure the most efficient, lowest maintenance and most sustainable operation. Remote communication ensures real time monitoring and so maintenance can be effected from any location in the world.

The new *gridtogo*™ **INGENIUM** incorporates many standard features that include automatic system bypass (50A standard), an advanced EMS (Energy Management System) system mimic control panel, local wi-fi connection to a smart hand held device and automatic DC isolator switch with pre-charge feature. Custom configurable input/output arrangement ensures interface to suit your specific needs.

Alternative Battery Technologies

The *gridtogo™* **INGENIUM MX** can be fitted with alternative types and capacity of maintenance battery that include OPzV, Lead Carbon or Li-lon, each offering different properties and to suit specific budgets. Please discuss your needs with a technical advisor to establish the most appropriate specification for your requirements. Depending on the type and capacity of battery that is selected, storage capacity of up top 60kWhrs is possible.

Harsh Environment Preparation

For applications where harsh environmental conditions are anticipated, the *gridtogo™* **INGENIUM MX** can be built to a specification that provides a higher level of ingress protection, galvanised enclosure and additional measures to increase resilience to such rigorous conditions. Please discuss your requirements with us.

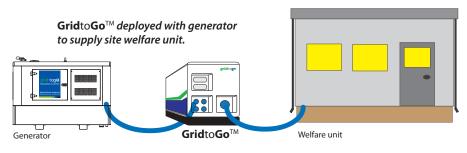
Control and Instrumentation

The *gridtogo™* **INGENIUM MX** has sophisticated but easy to use, intuitive controls. Output protection can be customised with adjustable RCD complemented by options for G99 protection on the outout. Input phase rotation indication is standard. User interface can be through a simple mmimic control panel or by use of a hand-held smart device using wi-ficonnectivity.



| SPECIFICATIONS | | | | |
|---------------------------------|----------------------------------|--|---------------------------------------|--|
| Output (400/230V 50Hz 3Ø): | | Instruments, controls & connections: | | |
| Continuous ac (Inverter) | 9kVA | Input connection | IEC 60309 or hardwire stud | |
| Inverter peak power (5 seconds) | 18kW | Optional AC2 input | IEC 60309 or hardwire stud | |
| Pass-through capacity | 50A | Output Connections AC | 3Ø 400V IEC 60309 or hardwire stud | |
| Input: (400/230V 50Hz 3Ø): | | Cascade ready | ✓ | |
| AC Maximum input 3Ø or 1Ø | 50A | System status control panel | ✓ | |
| System bypass capacity | 50A | Battery condition | ✓ | |
| Option for second AC input | 50A | Battery main isolator | ✓ | |
| Dimensions: | | Output MCB's | ✓ | |
| Length | 1500mm | Programmable gen auto-start signal | ✓ | |
| Height | 1550mm | Optional features: | | |
| Width | 1000mm | Integrated MPPT Solar PV charge controller | • PV | |
| Ingress protection rating | IP34 Suitable for outdoor use | High capacity system bypass | • BPS | |
| Standard Finish | Epoxy Powder Coat RAL 9016 | Single to three phase conversion | • PC | |
| Noise Levels | Inaudible above background | Harsh environment pack | • HE | |
| Maximum heat rejection | 750kW | Free air cooling pack | • FA | |

| STANDARD BATTERY OPTIONS | | | | |
|-----------------------------|----------------------------------|----------------------------------|--|--|
| Battery Type | Lead Carbon | Li-lon NMC | | |
| Battery design cyclic-life | 3000 to 80% dod, 4000 to 60% dod | 2000 to 80% dod, 4000 to 60% dod | | |
| Nominal Battery Capacity | 500Ahrs @C10 | 400Ahrs | | |
| Useable stored energy | 25kWhs | 20kWhs | | |
| Total unit weight | 1550 kg | 850 kg | | |
| Operating temperature range | -20°C +55°C | -20°C +55°C | | |



Specifications may change without prior notice. E&OE

TELECOM INDUSTRIAL OFF GRID TEMPORARY POWER UTILITY



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