

## GridtoGo™ Datasheet

### gridtogo™ INGENIUM MX 16/30

#### Features:

- 230V 50Hz 3Ø output, 16kVA
- GSM Remote monitoring
- Maintenance free Li-Ion battery
- 30kWh stored energy
- Full system DC isolator with pre-charge
- 100A pass-through capacity
- Integrated smart Solar PV storage capability
- Advanced EMS with smart device control
- V50 Power™ for enhanced DC bus stability



complete power solutions



Unit shown with optional road tow trailer.

1Ø 230V



1Ø 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 grid 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-Ion, 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 to 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.

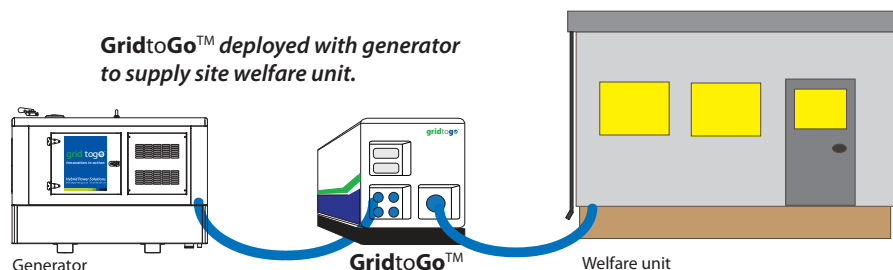
#### Control and Instrumentation

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 output. Input phase rotation indication is standard. User interface can be through a simple mimic control panel or by use of a hand-held smart device using wi-fi connectivity.



SPECIFICATIONS			
<b>Output (400/230V 50Hz 3Ø):</b>		<b>Instruments, controls &amp; connections:</b>	
Continuous ac (Inverter)	16kVA	Input connection	IEC 60309 or hardwire stud
Inverter peak power (5 seconds)	32kW	Optional AC2 input	IEC 60309 or hardwire stud
Pass-through capacity	100A	Output Connections AC	3Ø 400V IEC 60309 or hardwire stud
<b>Input: (400/230V 50Hz 3Ø):</b>		Cascade ready	✓
AC Maximum input 3Ø or 1Ø	100A	System status control panel	✓
System bypass capacity	100A	Battery condition	✓
Option for second AC input	100A	Battery main isolator	✓
<b>Dimensions:</b>		Output MCB's	✓
Length	1500mm	Programmable gen auto-start signal	✓
Height	1550mm	<b>Optional features:</b>	
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-Ion 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	600Ahrs
Useable stored energy	25kWhs	30kWhs
Total unit weight	1550 kg	1050 kg
Operating temperature range	-20°C +55°C	-20°C +55°C



Specifications may change without prior notice. E&OE