

## GridtoGo™ Datasheet

### gridtogo™ INGENIUM MX 10 OPzV

#### Features:

- 230V 50Hz 1Ø output, 10kVA
- GSM Remote monitoring
- Deep cycle maintenance free OPzV-S battery
- 30kWh stored energy
- Full system DC isolator with pre-charge
- 63A pass-through capacity
- 63A Auto full system bypass
- Integrated smart Solar PV storage capability
- Advanced EMS with smart device control



complete power solutions



1Ø 230Vac/245Vdc in



1Ø 230V out

#### General Description

**gridtogo™ INGENIUM** is a universal Battery Energy Storage System (BESS) 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 mains power. Power can be derived from integrated 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 best environmental impact is achieved. Remote communication ensures real time monitoring and maintenance can be effected from any location in the world.

The new **gridtogo™ INGENIUM** incorporates many standard features that include automatic 63A system bypass, an advanced EMS (Energy Management System), local wi-fi connection to a smart hand held device and automatic DC isolator switch with pre-charge feature. IEC 60309 connections or Solar MC4 connections ensures interface to suit your specific needs.

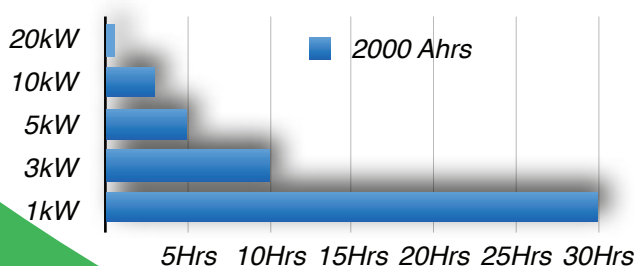
#### Cascade for more power

All units are supplied 'cascade ready' so multiple units can be used together for more power and battery capacity.

#### Alternative Battery Technologies

The **gridtogo™ INGENIUM** 10 OPzV, unit is fitted with an OPzV-S high cyclic capacity, maintenance free lead acid battery. Alternative battery options are available that include Lead Carbon and Li-Ion NMC 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.

Duration vs average load based on  
OPzV-S lead acid battery



#### Key Benefits:

- Reducing Environmental impact
- Reducing generator runtime, service costs and fuel usage
- Reduced Noise, Vibration and Emissions
- Converts standard diesel generator into hybrid system
- Remote energy data reporting
- Easily deployable stored energy

SPECIFICATIONS			
<b>Input:</b>		<b>Instruments, controls &amp; connections:</b>	
AC Input	187-265Vac 1ph	Charging Status	✓
AC1 Maximum input 1Ø	63A, IEC 60309	Battery Monitor Display	✓
AC2 Maximum input 1Ø	63A, IEC 60309	Programmable gen auto-start signal	✓
System bypass capacity	63A	Cascade ready	✓
Solar DC Input	3 x 245V strings, 15A	Output MCB's & RCD's	✓
Earthing Provison	M10 Stud	Colour Display Screen (CCGX)	✓
<b>Output:</b>		<b>Dimensions:</b>	
Output Voltage	230Vac @50Hz	Length	1600mm
Continuous AC (Inverter)	10kVA (8kW)	Height	1802mm
Power Factor	0.8Φ	Width	1020mm
Inverter peak power (2 seconds)	15kW	<b>Miscellaneous:</b>	
Pass-through capacity	63A	DC Voltage Range	19.6-28.2V
IEC(BS)60939 1Ø Outlets (30mA RCBO)	2 x 32A	Maximum heat rejection	1kW
Generator Autostart	NAC3FCA Neutrik Plug	Noise Level	≤49dB(A)
<b>Optional Features</b>		Standard Finish	Epoxy Powder Coat, RAL 9016
High Capacity System Bypass	• BPS	Ingress Protection Rating	IP34
Integrated MPPT Solar PV Change Controller	• PV	Operating Temperature Range	-20 to 50°C
Trailer Mounted System	• TMS	Lifting Points	2No. Eyes, Fork Pockets

STANDARD BATTERY OPTIONS	
Battery Type	Gel lead acid OPzV-S
Battery design life	2000 cycles to 80% DoD, 3000 cycles to 60% DoD
Nominal Battery Capacity	2000 Ahr's
Useable stored energy	30 kWh's
Total unit weight	1,850 kg

**gridtogo™** deployed with generator to supply site welfare unit

