

GridtoGo™ Datasheet

gridtogo™ INGENIUM LX 45 OPzV



complete power solutions

Features:

- 400/230V 50Hz 3Ø output, 45kVA
- GSM Remote monitoring
- Deep cycle maintenance free OPzV-S battery
- 60 or 90kWh stored energy
- Full system DC isolator with pre-charge
- 100A pass-through capacity
- 125A Auto full system bypass
- Integrated smart Solar PV storage capability
- Advanced EMS with smart device control
- V50 Power™ for enhanced DC bus stability



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 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 system bypass (125A standard) with options up to 400A meaning connection of up to 300kVA input without need for additional switchgear, 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.

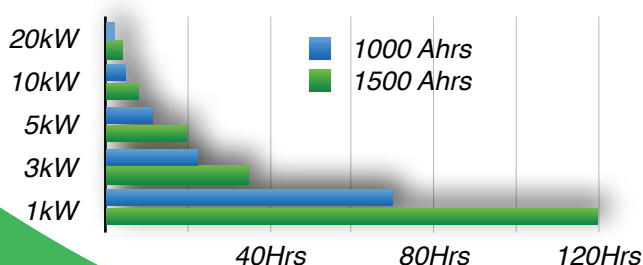
Cascade for more power

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** 45 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 up to 110kWh and Li-Ion NMC (to 200kWh) 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



Custom configured input/output arrangement so your specific preferences can be met as standard

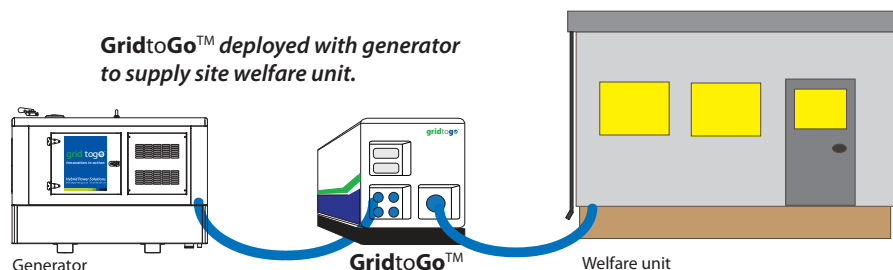


How long does it last?

The most common question to be asked is "how long will the unit last on a single charge?" The answer depends entirely on how fast the stored energy is used up. Power usage is not always steady so it's difficult to be specific but, as a guide, this chart shows typical duration based on average power use as a percentage of rated output.

SPECIFICATIONS			
Output (400/230V 50Hz 3Ø):		Instruments, controls & connections:	
Continuous ac (Inverter)	45kVA	Input connection (AC1 & AC2)	IEC 60309 or hardwire stud
Inverter peak power (5 seconds)	90kW	(AC2)	3Ø 400V IEC 60309 or hardwire stud
Pass-through capacity	100A	Output Connections AC	3Ø 400V IEC 60309 or hardwire stud
Input:		Cascade ready	✓
AC1 Maximum input 3Ø (Option)	125A	System status control panel	✓
AC2 Maximum input 1Ø	125A	Battery condition	✓
System bypass capacity	125A	Battery main isolator	✓
Dimensions:		Input & Output MCB's	✓
Length	2000mm	Programmable gen auto-start signal	✓
Height	1960mm	Optional features:	
Width	1195mm	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	6kW	Free air cooling pack	• FA

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	1000Ahrs	1500Ahrs
Useable stored energy	60kWhrs	90kWhrs
Total unit weight	2850 kg	3500 kg



Specifications may change without prior notice. E&OE