

Three Phase UPS

Galaxy 5000

20/30/40/60/80/100/120 kVA

A new dimension of performance

High power quality

The Galaxy 5000 range supplies clean stable power to sensitive loads to ensure

- ▶ Optimum operation
- ▶ Extended life.

Advanced architecture

- ▶ On-line double conversion supporting the load whether the mains is present or not
- ▶ DSP PWM control with variable pulse width and frequency

The latest compact IGBT Sixpack technology.

Output voltage total harmonic distortion (THDU) less than 2%.

Flexibility: upgrading along with continuity of service

Customer's power demands, types of load to be protected and backup times needed are always changing, Galaxy 5000 range is extremely flexible.

- ▶ Paralleling of up to 6 modules for higher power or redundancy
- ▶ A choice of backup times from 5 minutes to 8 hours
- ▶ Many different architectures with Upsilon STS
- ▶ Compatible with inductive and leading power factor loads
- ▶ Numerous options can be added to the UPS module (lightning arrestor, backfeed protection, etc.).

Reduced total cost of ownership

The Galaxy 5000 is designed to minimise infrastructure costs:

- ▶ Small footprint with built-in batteries up to 80kVA rating
- ▶ Input current total harmonic distortion (THDI) less than 3% avoiding oversized cabling, circuit breakers and generator set

The Galaxy 5000 reduces operating costs:

- ▶ The efficiency in on-line double conversion mode is up to 94% and during economy mode the efficiency can reach 97%, reducing your utility bill.



High power availability

The Galaxy 5000 has been designed for non-stop, 24/7 operation.

- ▶ Fault tolerance with built-in automatic and manual bypass
- ▶ Very low component count and redundant cooling for higher reliability
- ▶ High overload and short-circuit capacities to improve down stream circuit discrimination.
- ▶ Battery backup time assured by the Digibat battery management system.

Safe and easy to use

The Galaxy 5000 has an intuitive man / machine interface making it easy to control.

- ▶ Large, high definition display (120x93mm, 320x240 pixels)
- ▶ Animated mimic display
- ▶ 2500 event logs
- ▶ Remote supervision compatible with a wide range of building and network management systems.

Ideal for medium power data centres and industrial application



Data centres: server rooms, communications centres, data storage units, network equipment.



Telecommunications: PSTN/ISDN infrastructure, cell phone MSCs and OMCs, Internet service providers, transmitters, control rooms, editing studios.



Industrial: critical continuous processes (motors, speed controllers), clean rooms, paint booths, instrumentation, monitoring, controls, safety systems.

THE UNINTERRUPTIBLE POWER PROVIDER

MGE
UPS SYSTEMS

Three Phase UPS - Galaxy 5000

Communications

The Galaxy 5000 range can be connected to all type of networks

- ▶ To communicate the UPS status
- ▶ To shut down the operating systems of the servers connected, automatically in a controlled manner
- ▶ To be supervised as part of a group of UPSs.



Easy to maintain

MGE maintenance engineers have played an active role in designing the Galaxy 5000 range to ensure that maintenance and troubleshooting is faster and safer.

- ▶ All components are accessible with greater ease
- ▶ Life cycle monitoring system for preventive maintenance.

Standard features

- ▶ On-line double conversion architecture (EN50091 Voltage and Frequency Independent UPS) with built in static switch and maintenance by-pass
- ▶ IGBT charger with power factor correction for low input current total harmonic distortion
- ▶ Soft start, walk-in charger for compatibility with generator sets
- ▶ Up to 8 hours backup time
- ▶ Can start without mains (cold start)
- ▶ Batteries built-in up to 80kVA
- ▶ Circuit breaker for deep discharge protection
- ▶ Redundant cooling on secondary source
- ▶ Modular paralleling
- ▶ Sequential start-up of UPSs (in parallel configuration) to reduce genset size
- ▶ Multilingual graphic display
- ▶ LED overview
- ▶ 2500 event logging
- ▶ Emergency stop (EPO)
- ▶ Supplied with remote signalling relay card.

MGE PowerServices™

1 year guarantee, including batteries.

- ▶ Commissioning: commissioning your installation in accordance with the OEM's recommendations
- ▶ Teleservice: remote monitoring via the modem
- ▶ Maintenance contracts: a selection that suits your specific needs
- ▶ Battery replacement: optimum match of UPS and batteries
- ▶ Battery monitoring: monitoring and continuous analysis of every cell.
- ▶ Site audit: analysis and recommendations based on the technical environment.

Available options

- ▶ Eco operating mode
- ▶ Parallel communication cards (up to 6)
- ▶ Monitoring and shutdown software
- ▶ Isolation transformer
- ▶ Top cable entry
- ▶ IP 32 industrial version
- ▶ B2000 or Cellwatch, block cell battery monitoring
- ▶ Management of 2 battery circuit breakers
- ▶ Backfeed protection for mains 1 and mains 2
- ▶ Manual external bypass: 160 kVA, 360 kVA and 600 kVA
- ▶ EMC : C2
- ▶ Synchronisation module
- ▶ Total fan redundancy and failure detection.

Technical characteristics

Nominal rating (kVA) PF = 0.8	20	30	40	60	80	100	120
Normal AC supply input							
Input voltage range	250V ⁽¹⁾ to 470V three phase						
Inputs Mains 1 and Mains 2	Separate or common						
Frequency	50Hz / 60Hz ± 8%						
Input current total harmonic distortion (THDI)	< 3%						
Input power factor	> 0.99						
Bypass system input							
Nominal input voltage	340V to 470V Three phase + neutral						
Frequency	50Hz / 60Hz ± 8%						
Output							
Output voltages	380V - 400V - 415V ±3% three phase + neutral						
Voltage regulation	± 1%						
Frequency	50Hz / 60Hz						
Over load	150% 1 minute, 125% 10 minutes						
Output voltage total harmonic distortion	THDU < 2%						
Max load crest factor	3:1						
Batteries							
Backup time	5 minutes to 8 hours with standard internal charger						
Type	sealed lead acid, open lead acid, nickel cadmium						
Overall efficiency							
Double conversion mode	up to 94%						
Economy mode	up to 97%						
Environmental conditions and noise							
Storage temperature	-25°C to +45°C						
Operating temperature	up to 40°C (2)						
Operating altitude	1000 m						
Paralleling							
Modular	up to 6 modules						
Standards and approvals							
Performance and safety	IEC/EN 62040-1, IEC/EN 60950						
Performance and design	IEC/EN 62040-3						
Design and manufacturing	ISO 14001, ISO 9001, IEC 60146						
EMC immunity	IEC 61000-4 - 2 to 6						
EMC emissions	IEC 62040-2 C3						
Approvals	TUV - LCIE - CEM - CE Mark						
Dimensions and weight (depth = 850 mm and height = 1900 mm)							
UPS without batteries (width in mm)	710						
Weight	400kg		520kg				
UPS + built-in batteries (width in mm)	1010						
From 5 minutes to 35 minutes ⁽³⁾			738kg	888kg	1050kg		
From 10 minutes to 50 minutes ⁽³⁾	732kg		888kg	975kg			
From 15 minutes to 90 minutes ⁽³⁾			975kg				
From 20 minutes to 110 minutes ⁽³⁾	738kg	888kg					
From 30 minutes to 120 minutes ⁽³⁾	888kg	975kg					
Battery cubicles (width and weight)							
From 5 minutes to 35 minutes ⁽³⁾ (width in mm)							710
From 5 minutes to 35 minutes ⁽³⁾ (weight)					885kg	980kg	
From 10 minutes to 50 minutes ⁽³⁾ (width in mm)	710					1010	
From 10 minutes to 50 minutes ⁽³⁾ (weight)				885kg	1142kg	1307kg	
From 15 minutes to 80 minutes ⁽³⁾ (width in mm)			710	1010	1010	2x1010	
From 15 minutes to 80 minutes ⁽³⁾ (weight)			885kg	1142kg	1307kg	1764kg	
From 30 minutes to 120 minutes ⁽³⁾ (width in mm)			710	1010	2x710	710+1010	
From 30 minutes to 120 minutes ⁽³⁾ (weight)			882kg	1307kg	1764kg	2439kg	

1: At 70% nominal load. 2: There is a risk of premature battery ageing above 25°C. 3: From 100% to 30% nominal load.

MGE UPS SYSTEMS

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