MGE Galaxy PW

Three Phase UPS

20/30/40/50/60/80/100/120 kVA

Centralised protection with high energy quality

Performance 3 Phase Power Protection with Adaptability to Meet the Unique Requirements of Small to Medium Datacenters, Building and Facilities, Enterprise Networks, Process & Infrastructures, Telecom.

> Flexible and adaptable
> Strong electrical features
> Intuitive monitoring
> Parallel Capable
> Output Synchronization to External Source
> Galvanic isolation on output
> High availability architectures
MGE Galaxy PW Benefits

Anti-pollution and economic operation
An active THM filter integrated into the UPS reduces energy costs and installation size:
- Upstream power factor > 0.95
- Reduced THDI < 4%
- 20% reduction in r.m.s. current

High power quality
The protected equipment operates at maximum efficiency. The MGE Galaxy PW delivers optimum power quality:
- Double conversion technology
- Exceptional resistance to peak currents and short-circuits
- Output voltage stability

An upgradeable solution to keep pace with increasing requirements
Up to 4 UPSs can be connected in parallel for:
- Increased power capacity
- Redundancy of power sources
- Redundancy of distribution with the Upsilon STS and synchronisation module

Enhanced battery management for greater availability
Fitted as standard, the 'DigiBat™' system optimises the recharge parameters of the battery in order to increase its service life. It can also be used to calculate the available battery capacity. By automatically checking every component of the battery, the 'battery monitoring' option can be used to predict when it will fail.

by Schneider Electric
MGE Galaxy PW
20/30/40/50/60/80/100/120 kVA
Guaranteed solutions

Network administration and remote monitoring
The Galaxy PW range offers a number of standard communication solutions and accessories to adapt UPS operation to the network environment:
> Standard communications port (Media contact 11 / 6 dry contacts, 250 V, 5 A)
> Three expansion slots for other communication protocols
> MultiSlot expansion module

Management software
Solution-Pac is used for remote installation management. It offers all the functions listed below:
> Remote alerts via e-mail, fax, GSM or pager
> Remote restart or reset of a faulty device, without interrupting other protected equipment
> Supervision of UPS environment data and bay status
> Automatic shutdown of network operating systems before the end of the battery backup time

Enhanced user interface
Communication and supervision capabilities have been optimised. Every effort has been made to increase the self-diagnostics systems:
> Multilingual graphical interface
> Analysis of 150 different system parameters
> Logging and time stamping of the last 500 events
> Indication of battery backup time

DigiBat™ for optimised availability
DigiBat™ optimizes battery service life and reinforces an already high degree of availability through the following functions:
> Measurements of true battery backup time, taking into account the age of the battery and the ambient temperature
> Estimation of battery service life
> Protection against deep discharges
> Regulation of battery charging voltage depending on the temperature
> Limitation of battery current

Optimum voltage quality
To handle the vast increase in non-linear loads, MGE Galaxy PW incorporates the most innovative solutions:
> Free-frequency IGBT technology to keep distortion below 3%
> Voltage variations less than 5% for a 100% load step change
> Capacity to supply loads with a crest factor of up to 6.6

Generator operation
MGE Galaxy PW was designed precisely for optimum operation with a generator set
> Elimination of upstream harmonics
> Sequential start-up of UPSs, to limit inrush current
> Current limiting during generator operation
> Progressive start-up of UPSs when AC power returns

Oil & Gas Industry application, etc.,
Telecom equipment: MSC, communication centres, etc.
Industrial processes; programmable logic controllers, speed control processors, etc.

by Schneider Electric
## Technical characteristics

<table>
<thead>
<tr>
<th>Nominal power output (kVA at PF = 0.8)</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active power output (kW)</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>64</td>
<td>80</td>
<td>96</td>
</tr>
</tbody>
</table>

### Normal AC supply input
- **Nominal voltages**: 380-400-415 V +/- 10% - three-phase (adjustable to +/- 15%)
- **Frequency**: 50 or 60 Hz +/- 10%  
- **Current distortions (THDI)**: < 4% with THM filter
- **Power factor**: up to 0.96 with THM filter

### Bypass supply input
- **Voltages**: 380-400-415 V +/- 10% - three-phase + neutral
- **Frequency**: 50 or 60 Hz +/- 10%

### Output
- **Configured Ph/Ph voltages**: 380-400-415 V +/-1% - three-phase + neutral
- **Frequency**: 50 or 60 Hz + -0.09% ad unstable
- **Permissible overloads**: 150% 1 minute 125% 10 minutes
- **Voltage distortion**: THDU < 1.5% Ph/Ph, < 2% Ph/N with linear load\(^1\)
  - THDU < 3% Ph-Ph and Ph-N with non-linear load\(^1\)
- **Crest factor**: 3:1

### Batteries
- **Battery discharge times**: 8, 10, 15, 20, 30, 60 minutes, other values on request
- **Type**: Sealed lead-acid battery (service life 10 to 12 years)

### Overall efficiency
- **Double conversion mode**: up to 93%
- **ECO mode**: up to 97%

### Environment
- **Losses to be dissipated\(^2\) (in kW)**: 1.5, 2.2, 3, 3.2, 4.1, 5.4, 7.1, 8.9
- **Storage**: -25°C to +45°C (with batteries)
- **Operation**: 0°C to 35°C (40°C for a period of 8 hours)
- **Noise level (dB(A))**: 58, 58, 58, 60, 60, 62, 64, 65, 67

### Technical standards
- **Construction and safety**: IEC 62040-1, IEC 60950, EN 50091-1
- **Performance and topology**: IEC 62040-3, EN 50091-3
- **Design and manufacture**: ISO 14001, ISO 9001, IEC 60146
- **EMC**: IEC 62040-2 and EN 50091-2 level B
- **Certifications and identification marking**: TÜV, CE

### Dimensions and weights of the UPS (depth = 825 mm)

<table>
<thead>
<tr>
<th>Nominal power output</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (mm)</td>
<td>715</td>
<td>715</td>
<td>715</td>
<td>715</td>
<td>715</td>
<td>715</td>
<td>715</td>
<td>715</td>
</tr>
<tr>
<td>Height (mm)</td>
<td>1400 ou 1900</td>
<td>1900</td>
<td>1900</td>
<td>1900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>490</td>
<td>490</td>
<td>490</td>
<td>540</td>
<td>540</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

### Battery compartment (depth = 825 mm and height = 1400 mm)

<table>
<thead>
<tr>
<th>10-minute autonomy</th>
<th>Width (mm)</th>
<th>715</th>
<th>715</th>
<th>715</th>
<th>715</th>
<th>1015</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>480</td>
<td>500</td>
<td>640</td>
<td>670</td>
<td>820</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>30-minute autonomy</td>
<td>Width (mm)</td>
<td>715</td>
<td>1015</td>
<td>1730</td>
<td>1730</td>
<td>2445</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>660</td>
<td>945</td>
<td>1340</td>
<td>1650</td>
<td>2030</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### Battery compartment (depth = 825 mm and height = 1900 mm)

<table>
<thead>
<tr>
<th>10-minute autonomy</th>
<th>Width (mm)</th>
<th>715</th>
<th>715</th>
<th>715</th>
<th>715</th>
<th>715</th>
<th>1015</th>
<th>1015</th>
<th>1430</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>500</td>
<td>530</td>
<td>675</td>
<td>690</td>
<td>845</td>
<td>1100</td>
<td>1370</td>
<td>1730</td>
<td></td>
</tr>
<tr>
<td>30-minute autonomy</td>
<td>Width (mm)</td>
<td>715</td>
<td>715</td>
<td>1430</td>
<td>1430</td>
<td>1730</td>
<td>2030</td>
<td>2030</td>
<td>2745</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>695</td>
<td>945</td>
<td>1390</td>
<td>1685</td>
<td>1930</td>
<td>2475</td>
<td>2765</td>
<td>3820</td>
<td></td>
</tr>
</tbody>
</table>

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2: The indicated losses are produced by the UPS at nominal load with the battery in floating mode.  
* Standard Configuration – Back-up time at 70-75% load depending upon the available battery capacity.