# **DELPHYS XL** High Power UPS

1000 and 1200 kVA/kW





#### The solution for

- > Data centre
- Industry
- Building

#### **Strong points**

- Flexible integration with an optimised footprint
- Unmatched resiliency to maximise availability
- Best in class energy management & savings
- Critical chain interoperability
- Easy and safe maintenance supporting low MTTR

#### **Conformity to standards**

- > EN/IEC 62040-1
- > EN/IEC 62040-2
- > EN/IEC 62040-3
- > EN/IEC 62040-4

### **Certifications and attestations**







## Function

**DELPHYS XL** is a highly compact UPS with best in class efficiency offering inherent redundancy and allowing by design, fast & safe maintenance operation. A fully resilient UPS architecture eliminating traditional single points of failure.

## Advantages

## Flexible integration with an optimised footprint

- High power UPS packed into a compact and optimised design.
- Highly flexible connection to your electrical environment.
- Easy and fast deployment of the entire UPS system.
- Up to 70% space saving when combined with lithium-ion batteries.
- Advanced on-site testing features to certify commissioning.

## Unmatched resiliency to maximise availability

- UPS architecture eliminates single point of failure related to traditional monolithic UPS.
- Fault tolerant concept provides double conversion mode redundancy up to 80% of the rated power.
- Self-sufficient power bricks with advanced selective disconnection.
- Based on our field proven high power XL platform.
- Limited number of power converters

   each designed to eliminate potential fault propagation for best MTBF.
- Powerful and robust static bypass.

#### Best in class energy management & savings

- 99,1% efficiency with our Smart Conversion Mode.
- 97,1% VFI mode as standard.
- ENERGY SAVER for higher system efficiency under low load conditions (bricks in hot stand-by).
- Multiple advanced operating and testing mode to minimise TCO.
- Ready for grid support functionalities.

#### Critical chain interoperability

- Designed to fit any data centre power distribution architecture.
- Advanced functionalities to ensure Genset stability upon restart or significant variation in loads.
- Designed to coordinate perfectly with our downstream connected STS.
- Supports even the most challenging load variation.

## Easy and safe maintenance supporting low MTTR

- Reduced MTTR supported by coldextractible power bricks.
- No cabling operation required to slide-out a power brick.
- Front access to all components.
- Safe servicing thanks to" hands outside" maintenance.
- Maintenance station with embedded operating power brick as a spare.
- Option to test the UPS and batteries without load when carrying out maintenance activities.



## DELPHYS XL Three-phase UPS 1000 and 1200 kVA/kW

#### UPS flexibility

- Common or separate rectifier and mains bypass.
- Top and bottom cable entry or bus bar flanges.
- Multiple DC connection capability
- Compatible with different energy storage technologies (e.g. Li-Ion, VRLA, Ni-Cd...).

#### General characteristics

- Intrinsic redundancy with selective fault disconnection.
- Redundant cooling.
- Unit heat run test without dummy load bench.
- External breakers position management.
- Backfeed protection: detection circuit.
- Energy saver mode.
- Rails and trolley for power brick extraction or cold-swap.

#### Electrical options

- Input, output and maintenance bypass switches.
- PEN kit for TN-C grounding system.
- Reinforced battery charger.
- Battery protection tripping kit.
- SMART CONVERSION mode.
- BCR (Battery Capacity Re-injection).
- ACS synchronisation system.
- Cold start.
- Maintenance Station with spare power conversion brick.
- Advanced Genset Management..

## Standard communication features

- User-friendly 7" touch-screen multilingual colour graphic display.
- USB port to download UPS reports and log files.
- Ethernet port for service purposes..

### Communication options

- Dry-contact interface (configurable voltage-free contacts).
  MODBUS RTU RS485 or TCP.
- BACnet/IP interface.
- NET VISION: professional WEB/ SNMP Ethernet interface for secure UPS monitoring and remote automatic shutdown.
- NET VISION EMD: Environment Temperature and Humidity sensor with 2 inputs.
- Remote View Pro supervision software.
- Remote touch-screen panel.

### Technical data

UPS power rating	1 000 kVA / kW	1 200 kVA / kW
Efficiency in Double Conversion Mode	Up to 97,1% - certified by third party (Bureau Veritas or TÜV)	
Efficiency in Smart Conversion Mode	Up to 99,1% - certified by third party (Bureau Veritae or 100)	
Parallel capability	Up to 4 units	
INPUTS		
Nominal input voltage	380 / 400 / 415V - 3Ph or 3Ph+N	
Input voltage tolerance*	200 to 480V	
Input connection	Common or separated / top or bottom	
Frequency range	50/60Hz ± 10%	
Input power factor / THDi	> 0.99 / < 1.5% @ full load	
Power walk-in on Genset	Linear ramp - from 1A/sec to 1000A/sec	
OUTPUTS		
Nominal output voltage	400 V (380 / 415) - 3Ph or 3Ph+N	
Frequency range	$50/60$ Hz $\pm$ 0.01% (free running)	
Voltage regulation	± 1% steady state	
Output voltage distortion (THDv)	< 1%	
Output voltage performance (load variation 0 - 100%)	Complies with IEC 62040-3 Class 1 (VFI-SS-111)	
Inverter overload capability	110 % 1h / 125% 10 min / 144% 1 min	110 % 1h / 125% 10 min / 150% 1 min
Bypass overload capability	110% continuous / 125% 10 min / 150% 1 min	
Inverter short circuit capability	up to 3230 A	up to 4090 A
Bypass short circuit selectivity	Fuseless architecture (I <sub>cw</sub> 65kA)	
BATTERIES		
Battery type - 2 wires (+/-)	VRLA / Lithium-ion	
Battery voltage range	Up to 705 V	
Battery connection capability	Up to 10 strings (w/o extra cabinet)	
Lithium-ion communication	Modbus TCP / dry contact	
ENVIRONMENT		
Operating temperature	0 - 40°C	
Humidity	0 - 95% without condensation	
Air flow	From front to top	
Maximum altitude without derating	1000m (3,300 ft)	
Standard protection rating	IP20 / IP21 (optional)	
Seismic rating	Zone 2 / Zone 4 (optional)	
Frame colour	RAL 7016	
DIMENSIONS AND WEIGHT		
UPS dimensions (W x D x H)	2625 x 1000 x 2005	3003 x 1000 x 2005
Weight	2600 kg	3200 kg
Clearance	No rear or lateral clearance for installation and maintenance	



#### **Expert services**

Our services guarantee the highest level of availability to your UPS:

- > Technical advice
- Commissioning
- Manufacturer training
- > Optional power brick as a spare
- Maintenance contracts including digital services

