UPS **3-PHASE**

INGENIO MAX

from **200** kW —— to **500** kW

GREEN 3-L CONVERSION

Applications

- Medium data centre
- Large data centre
- Network & Server
- Industrial controls & process automation
- Medical equipment
- Building automation

Very High Efficiency

Patented 3-level Green Conversion technology.

Compact footprint

Some of the most compact footprints on the market and full front access.

Reduced TCO

Flexible system up to 4 MW in a minimum space.

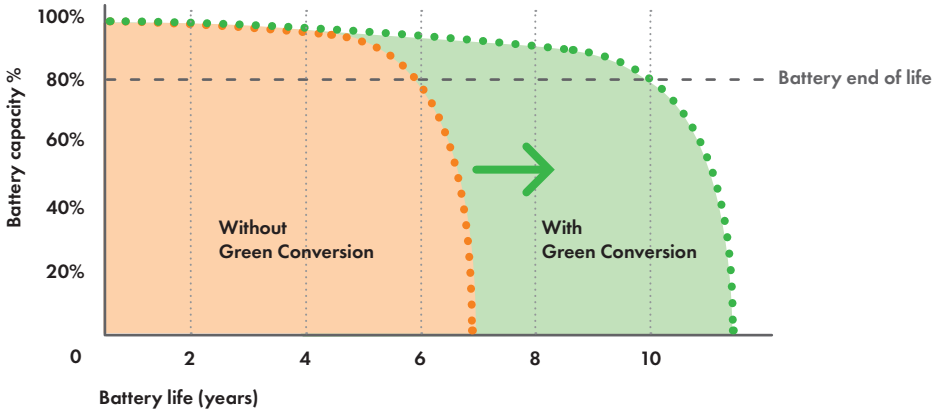
Low Total Cost of Ownership, high efficiency and compact solution for supplying reliable uninterrupted quality power to all critical applications in networking and medium to large data centre, health, finance, industrial processing, building and transportation markets and for TLC.

Ingenio Max: highest online efficiency in its class for a wide range of high power critical applications.

Features and benefits

- Three level Green Conversion, for enhanced system efficiency, very low noise and the lowest TCO in its category.
- Full output power rating (pf=1), ensuring optimal UPS sizing and high flexibility for all types of loads.
- On-line double conversion transformer-free design for low PUE and TCO.
- Full IGBT technology and electronic PFC,ensuring 0.99 input PF and THDi<3% for maximum upstream sources compatibility.
- Dynamic Charging Mode (DCM) for maximum versatility in long autonomy and low charging time applications.
- Green Conversion Battery Care (GCBC) for extended battery service life.
- Increased power density, for unmatched floorspace saving.
- Comprehensive set of communication options for total remote monitoring of equipment operation.
- Fully compliant with international product standards for maximum quality guarantee.
- Colour touch screen 10" display for easy monitoring and control.
- Lithium Battery compatible.

Green Conversion Battery Care vs conventional float charge enhanced battery service life



Main options

- Transformers/autotransformers for isolation or voltage adjustment.
- Battery voltage temperature compensation.
- External maintenance bypass wall-mounted box.
- Battery fuse switch wall-mounted box.
- Battery cabinets for long autonomy times.
- Parallel up to 8 units for system redundancy.
- Load-sync option.
- Common battery on selected models.
- Backfeed protection trip coil.

INGENIO MAX technical data

Rating (kVA)	**200**	**250**	**300**	**400**	**500**
Nominal Power (kW)	**200**	**250**	**300**	**400**	**500**
UPS dimensions WxDxH (mm)	880x970x1978			1430x970x1978	
UPS weight (kg)	530	745	675	1080	1250
Battery configuration	External 360 to 372 cells, VRLA (other options)				
Input					
Connection type	Hardwired 4w (rectifier), 4w (bypass)				
Nominal voltage	400 Vac 3-phase with neutral (rectifier); 380/400/415 Vac 3-phase with neutral (bypass)				
Voltage tolerance	-20%, +15% (rectifier); ±10% (bypass)				
Frequency and range	50/60 Hz, 45 to 65 Hz				
Power factor	>0.99				
Current distortion (THDi)	<3%				
Output					
Connection type	Hardwired 4w				
Nominal voltage	380/400/415 Vac 3-phase with neutral				
Frequency	50/60 Hz				
Voltage regulation	Static: ±1%; Dynamic: IEC/EN 62040-3 Class 1				
Power factor	Up to 1, without power derating				
Overload capacity	Inverter: 125% for 10 min, 150% for 30 s, >150% for 0.1s; Bypass: 150% continuous, 1000% for 1 cycle				
Efficiency (AC/AC)*	Up to 99%				
Classification by IEC/EN 62040-3	VFI-SS-111				
Connectivity and function extensions					
Front panel	10" colour touch screen display, 1024x600 pixels				
Remote communication	**Included:** serial RS232 and USB, backfeed protection monitoring contact, input terminal block (remote emergency power off, battery circuit breaker aux. cont., external maintenance bypass circuit breaker aux. cont., diesel mode aux. cont., external output circuit breaker aux. cont., remote transfer to bypass mode). **Optional:** SNMP adapter (Ethernet), Web interface (Ethernet), ModBus-TCP/IP (Ethernet), ModBus-RTU (RS485), from ModBus-RTU to PROFIBUS DP adapter; SPDT contact relay board; remote system monitoring panel; UPS managing and server shutdown software				
Optional features	Common battery; central bypass; cold start; Input /Output/Bypass isolation transformer; other I/O voltages 480/690 Vac with autotransformers; external maintenance bypass; battery fuse switch box; custom battery cabinets; battery thermal probe; parallel kit; load-sync for single UPS and load-sync box (3 UPS systems); top cable entry; backfeed tripping coil for bypass disconnector; other options on request				
System					
Internal manual bypass	Included as standard				
Protection degree	IP 20				
Colour	RAL 9005				
Installation layout	Wall, back to back and side by side installation allowed				
Accessibilty	Front access, bottom cable entry				

*according to IEC/EN 62040-3

Other features

Environmental	
Operating temperature range	0°C to +40°C
Storage temperature range	-10°C to +70°C
Altitude (AMSL)	< 1000 m without power reduction, > 1000 m with reduction of 0.5% per 100 m
Audible noise at 1 m (dBA)	< 65
Standards and certifications	
Quality assurance, environment, health and safety	ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007
Safety	IEC/EN 62040-1
EMC	IEC/EN 62040-2
Environment aspects	IEC/EN 62040-4
Test and performance	IEC/EN 62040-3
Protection degree	IEC 60529
Marking	CE