









## Solutio

3 Phase In - 3 Phase Out / 300kVA - 600kVA

- Interleaved 3 Level IGBT Technology
- Real Digital Signal Processor (DSP) controlled transformerless design
- High output power factor (PF:1, kVA=kW)
- Increased AC-AC Efficiency (up to 96.5%)
- High input power factor (PF: > 0.99)
- Low input current (THDi <3%)
- Low output voltage (THDv <2%)
- Wide input voltage range
- Graphical Multi-Functional touch screen display (7" TFT)
- Built-in static & manual Bypass
- On-site parallel connection availability up to 6 units
- Intelligent battery management system & expandable battery autonomy time
- Event log display up to 1024 events
- Advanced communication features; RS232, RS485, ESD (EPO, NO or NC selectable), Genset and USB ports as standard. Modbus & SNMP as optional
- Generator compatible operation mode (Selectable from HMI)
- 50/60Hz Frequency converter operation mode (Selectable from HMI)
- Backfeed protection (Optional)
- Cold start (Optional)
- User friendly input & output connection terminals
- High reliability & performance, thanks to artificial intelligence algorithms

















## Other Features

- Dual Input (Split Bypass) (Optional)
- Temperature controlled battery charging
- Selectable output voltage (220/380V, 230/400V or 240/415V) from HMI
- Selectable output frequency (50/60 Hz) from HMI
- Programmable dry contact board (Optional)
- Easy service with modular architecture
- Temperature controlled fan speed
- Special voltage application & galvanic isolation options
- Ability to operate without batteries
- Frequency converter (50/60 Hz) option
- Availability to disable bypass and inverter from HMI
- Availability to run battery test from HMI or SNMP
- Compatibility with dynamic loads
- Low audible noise, thanks to interleaved 3 Level IGBT Topology
- Advanced on-system diagnosis
- Bypass line temperature protection with temperature control on Bypass thyristor
- High Reliability, Rigid structure
- Advanced statistical data recording





## **Solutio**

## **TECHNICAL SPECIFICATIONS**

MODEL	SOLUTIO 300	SOLUTIO 400	SOLUTIO 500	SOLUTIO 600
Power (kVA)	300	400	500	600
Active Power (kW)	300	400	500	600
INPUT				
Phase		3Ph-	+N+PE	
Nominal Voltage	380V / 400V / 415V			
Voltage Range (VAC) (100% Load)	(-15%) (+20%)			
Voltage Range (VAC) (50% Load)	(-45%) (+20%)			
Nominal Frequency	50 / 60 Hz			
Frequency Range (Online Mode)	45 - 65 Hz			
Input Current Harmonics (THDi)*	<3%			
Input Power Factor	≥ 0.99			
OUTPUT				
Phase	3Ph+N+PE			
Nominal Voltage	380V / 400V / 415V (Selectable from HMI)			
Output Power Factor	1.0			
Static Voltage Regulation @ 100% Linear Load	±1%			
Output Voltage Harmonics (THDv)*	< 2% (Linear Load), < 4% (Non-Linear Load)			
Crest Factor	3:1			
Frequency	50/60 Hz (Selectable from HMI)			
Frequency Range ( Battery Operation Mode )	50/60 Hz ±0.01%			
Overload	Online – Battery Mode: <125% Load 10 mins, <150% Load 1 min; Bypass Mode: Up to 175%			
Efficiency*	up to 96.5% (Online), >98.5% (Ecomode)			
STATIC BYPASS LINE				
Phase	3Ph+N+PE			
Bypass Voltage Range	380V / 400V / 415V ( -15% +10% selectable from HMI)			
Bypass Frequency Range	± 3 Hz (Selectable from HMI)			
Transfer Time	0 msec			
BATTERY				
Battery Type	Maintenance-Free Lead Acid Batteries			
Charge Current (A)**	C/10 [Selectable from HMI]			
Battery Qty (pcs)	60			
Battery Protection	Deep Discharge Protection, Temperature-compensated Battery Charging			
Battery Test FRONT PANEL DISPLAY (HMI)	Standard (Automatic & Manual)			
Display	7" TFT Colorful Graphical Touch Screen Display			
Display Measurements	Load Percent, Input/Output/Bypass Voltage, Input/Output Current, Input/Output/Bypass Frequency, Output Power (kW & kVA), Output Power Factor, Battery ± Voltage, DC Bus ± Voltage, Back-up Time, Internal Temperature, Charge-Discharge Current			
Event Log Quantity	1024			
COMMUNICATION				
Interface (Communication Port)	RS232, RS485, ESD (EPO, NO or NC selectable), Genset and USB ports as standard. Modbus & SNMP as optional			
Dry Contact Signals	4pcs Programmable dry contacts (Optional)			
PROTECTION				
	Overload, High Temperature, High Voltage & High Current Protections, Backfeed Protection(Optional), Deep Discharge Protection, Short Circuit Protection			
ENVIRONMENT				
Operating Temperature	0 - 40 °C (20 - 25°C recomended for longer battery life time)			
Storage Temperature	-25 ∼ +55 °C			
Max. Operating Altitude	1000m			
Relative Humidity	0 - 95% ( non-condensing )			
Audible Noise Level ( from 1m distance )	< 70 dBA			
PHYSICAL SPECIFICATIONS				
Dimension (WxDxH) (mm)		50 x 1910	1860 x 9	32 x 1936
Weight (kg) (W/O Battery)	715	825	-	-
STANDARDS				
Safety	IEC/EN 60950,62040-1			
EMC Parternance	IEC/EN 62040-2			
Performance Protection Class	IEC/EN 62040-3 IP 20			
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<sup>\*</sup>May vary depending on UPS power & Load & Environmental Conditions
\*\*It is limited by 10% of UPS power
\*\*\*INFORM keeps the right to change the specifications without any notice