

## Features

- Online Double Conversion
- High Reliability and Performance DSP Control
- Power Factor Correction
- Cold Start Function (Cold Start From Batteries)
- Battery Charging Management
- Intelligent Ventilation Control
- ECO-IND Mode
- Rectifier And Inverter with IGBT Technology
- Manual Maintenance Bypass
- Electronic Automatic Bypass
- Automatic Protection Cut-off at the Entrance
- Isolation Transformer at the Output
- SNMP Communication Port
- Intelligent Battery Monitoring System

## Solves the following power quality issues

- High Voltage Surge
- Low Voltage Surge
- Sustained High Voltage
- Sustained Low Voltage
- Electric Noise
- Voltage Spikes
- Power Failure
- Frequency Variations
- Harmonic Distorsion

## Applications

- Sites / computer rooms
- Hospitals
- Security systems
- Machinery
- Robotics
- Buildings
- Shopping Centers
- Penitentiaries
- Train, subway

## Optional

- Parallel Technology by Capacity or Redundancy
- Industronic Power Conditioner to Protect UPS and Extend Battery Life
- Industronic Transient Voltage Surge Suppressor
- External Battery Bank for Extended Backup Time



# UPS-IND K 1300

Model: UPS-IND	13300	13400	13500	13600
<b>Input</b>				
Capacity (kVA / kW)	300 / 270	400 / 360	500 / 450	600 / 540
Voltage (Vca)*	220 / 380, 230 / 400, 240 / 415, 254 / 440, 266 / 460, 277 / 480			
Accepted Voltage Range	+15%, -20%			
Phases	Star: 3 phase star (4 wires + ground) / Delta: (optional) 3 phases (3 wires + ground)			
Frequency (Hz)	60 ± 10 % (optional 50 ± 10 %)			
THDI	≤ 2% at full load			
Input Power Factor	≥ 0.99			
Overload Protection	Switch & Fuse			
<b>Output</b>				
Output Power Factor	0.9 / (optional: 1)			
Voltage (Vca)*	220 / 380, 230 / 400, 240 / 415, 254 / 440, 266 / 460, 277 / 480			
Voltage Regulation Range	± 1%			
Frequency (Hz)	60 ± 0.2% (optional 50 ± 0.2%) in battery mode			
Wave Form	Pure THDV Sinusoidal Wave ≤ 0.5% (linear load), ≤ 2% (RCD load TP= 0.8 ≤ 6%)			
Transference Time (ms)	0.0 (online)			
Crest Factor	3 : 1			
Connection Type	Star (3 phases, 4 wire + ground)			
Overload Protection	Switch & Fuse			
Overload	130% of nominal load for 10 min; 150% for 1 min			
<b>Battery Bank</b>				
Voltage (Vcd)	480 (42 batteries)			
Battery Type	Lead Acid (Open or Sealed)			
Battery Management	Smart Monitor			
Battery Temperature Sensor	Optional			
Battery Backup Time at Full Load (min)	15			
Maximum Current Load (A)	20-100			
<b>Physical &amp; Mechanical</b>				
Audible Noise (dB)	< 72, a 1 meter		< 75, a 1 meter	
MTBF (h)	233,000			
Operation Temperature (°C)	-5 - 40			
Relative Humidity	0 - 95% without condensation			
Maximum Operating Altitude (mamsl)	2,000 at 100% & 3,000 at 96%			
Cabinet	Electrostatic baked epoxy coated steel, indoor installation, blank front, auto supported (non modular), IP20, black color (optional IP31)			
Dimensions, height x width x depth (mm)	1800 x 1600 x 1000		1800 x 2200 x 1000	
UPS Weight (kg)	1400	1700	2300	2400
<b>Technology</b>				
Conversion Type	Online Double Conversion, Microprocessor Controlled			
Rectifier	Regulated solid state & IGBT Power Factor Corrector			
Inverter Conmutation Elements	Static PWM Technology w/ IGBT transistors			
Filters	Anti harmonics (2% RMS distortion)			
Isolation Transformer	Dry Transformer			
Battery Status	Real Time Online/Discharge Information w/ 3 % Precision			
Thermal Dissipation (kBTU/h)	96.9			
Internal Bypass	Two: electronic (automatic) bypass, and manual bypass for maintenance/repair			
Paralleling	n+1 up to 4 units			
Certifications	CE-IEC 62040-1, CE-IEC 62040-2, ISO 9001: 2015			
Communication Interface	RS232, RS485, dry contact relay signal, SNMP Network Card or MODBUS, IEC-61850 compliant			
LCD Monochromatic Screen	Backlight: Input/Output Voltage, Load Capacity, Battery Voltage, Operation Status, mimic panel			
Dry Contacts	Inverter Operating, Inverter Failure, Statc Switch Failure, Normal Operation, Low Battery, Vent Failure, Rectifier Power Supply Failure			
Alarm	Low Battery, Abnormal CA Input, Inverter Failure, No Power Supply, Battery Operating, Ground Failure, Alternative Line Transference, Overheating			
Protection	Low Battery, Overload, Short Circuit, Overheating			

The specifications are subject to changes and modifications without prior notice, due to our commitment of continuous improvement of reliability, design and functionality of our products