

Features

- Supports power return
- Online Double Conversion
- Dual DSP for high reliability and performance Dual
- Input Power Supply: Normal and Bypass
- Rectifier with IGBT Technology
- UPS and battery self-test function Flexible
- Battery configuration (29 to 40) Intelligent
- Ventilation control
- Cold Start
- ECO mode and Emergency Power Off (EPO)
- 3-Step Inverter with IGBT technology
- Electronic automatic bypass and maintenance bypass
- SNMP network card
- Battery charge monitoring and management
- Electronic cards with anti-corrosion cover
- Intelligent battery monitoring system
- Easy on-site pairing
- Signals on dry contacts
- Output isolation transformer
- Shared battery bank for 2 UPS
- Compatible with Lithium Batteries

Problems solved

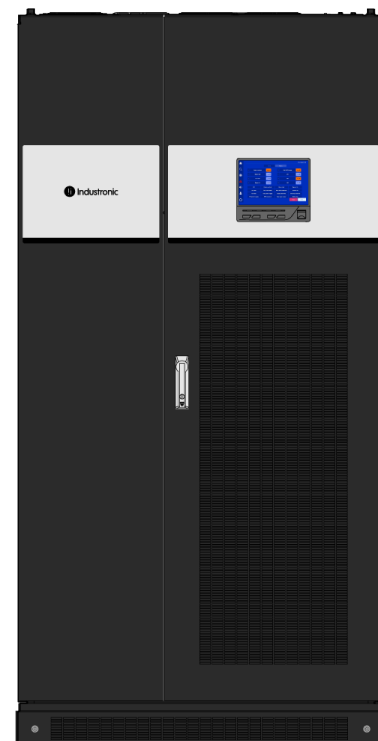
- High momentary voltage
- Low momentary voltage
- High sustained voltage
- Low sustained voltage
- Electrical noise
- Voltage peaks
- Power supply failure
- Frequency variation
- Harmonic distortion
- Grid energy return

Applications

- Manufacturing Industry
- Mining and smelting
- Semiconductor plant
- Petroleum and chemical industry
- Magnetic Resonance Medical Equipment
- Computed Axial Tomography Medical Equipment
- Precision instruments
- Machining Centers
- Air, Rail and Maritime Transportation

Complementary options

- Transformer or Autotransformer for coupling to different voltage levels.
- External battery bank for extended backup
- Industronic voltage conditioner / regulator to protect the UPS and extend battery life
- Surge Suppressor



Technical specifications

Model UPS-IND HF 1300 R1	1360 R1	13120 R1	13200 R1
Input			
Overload protection	Thermomagnetic switch normal input and bypass input		
Nominal voltage (Vac)	120/208 - 127/220 - 220/380 - 230/400 - 240/415 - 254/440 - 266/460 - 277/480		
Voltage range (Vac)	-25% to +25%		
Phases	Three phase star (3 phases + neutral + ground), Delta optional(3 phases + ground)		
Frequency range (Hz)	60 Hz +/-10% (50 Hz optional)		
Input power factor	≥ 0.99 at full load		
THDI	≤ 5% at 100 nonlinear load		
Output			
Capacity (kW/kVA)	54/60	108/120	190/200
Efficiency AC a AC max	94%		
Overload protection	Thermomagnetic switch at the output		
Output power factor	0.9		
Voltage(Vac)	120/208 - 127/220 - 220/380 - 230/400 - 240/415 - 254/440 - 266/460 - 277/480		
Voltage Regulation Range (Vac)	+/- 1%(Linear load)		
Frequency (Hz)	60 +/- 0.2% (on batteries) (50 Hz optional)		
Waveform	Pure sine		
Harmonic distortion THDV	THD ≤ 1% (linear load)		
Transfer time (ms)	0.0 milliseconds(Online mode to On battery mode)		
Connection type	Three-phase star (3 phases + Neutral + Ground), Delta Optional(3 phases + ground)		
Overload	101 to 105% continuous operation, 106% to 130% 10 min to bypass, 131% to 155% 1 minute to bypass, > 150% immediate bypass		
Battery bank			
BUS voltage (VCD)	Adjustable 348 to 480		
Battery voltage	12V		
Battery type	Lead Acid (sealed and maintenance free) (Lithium optional)		
Maximum charger charging current (A)	40 A		
Battery bank	External		
Battery lifetime	3 to 5 years at 25°C. At higher temperatures their useful life is considerably reduced. To keep the batteries healthy we recommend recharging them at least once every 3 months and to avoid damage recharge them every 6 months.		
Physical and mechanical			
Audible noise (dB)	< 65, at 1 meter		
Operating temperature(°C)	-5 to 40		
Relative humidity	0 - 95% non-condensing		
Maximum operating altitud (msnm)	Up to 1,500 m.a.s.l at 100% (up to 2,000 m.a.s.l with 1% per 100m)		
Cabinet	Steel with baked-on electrostatic epoxy coating		
Dimensions, height x width x depth (mm)	2000 x 600 x 800	2000 x 1000 x 800	2000 x 1000 x 800
UPS weight (kg)	525(without batteries)	800(without batteries)	1150(without batteries)
Technology			
Inverter	3 level with PWM type IGBT technology		
Rectifier	High efficiency PFC type with IGBT technology		
Isolation transformer at the output	Included		
Battery condition	Real-time online and downloadable information		
Thermal dissipation (kBTU/h) (full load)	27	41	68
Static internal bypass	Included		
Internal bypass maintenance	Included		
Paralleling	Up to 4 units		
Certifications	CE-62040-1, CE 62040-2, ISO 9001:2015		
Communications interface	EPO, 12 dry contact signals(8 output 4 input), RS232/RS485, SNMP Network Card, Battery Temperature Sensor		
Digital touch screen	Displays: Input and output voltage, charge capacity, battery voltage, operating status indicator, LED indicators, on and off buttons.		
Alarms	Low battery, abnormal input, UPS failure, overload, etc.		
Protection	Low battery, overload, short circuit, overtemperature, low voltage, etc.		