

## Features

- Online double conversion
- Inverter with 3 level IGBT technology for higher efficiency and minimized interference to grid
- Double DSP for high reliability and performance
- Power Factor 1.0
- Dual input design for mains and bypass
- Cold start function (cold start from batteries)
- Self-load test function
- Smart Ventilation Control
- ECO mode and EPO function
- Double bypass: electronic and maintenance
- AC/AC efficiency up to 97%,
- 2 Optional slot for SNMP and dry contact
- Anti-corrosion resistant coating for all PCB boards
- Easy onsite parallel slot modification (up to 8 units)

## 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 distortion

## Applications

- Sites / computer rooms
- Telecommunications
- Instrumentation equipment
- Audio and video equipment
- Intelligent buildings
- Shopping centers
- Security systems
- Electronic banking
- Robotics

## Optional

- Voltage transformer for coupling to the electrical power system or load voltage
- External battery bank for extended backup
- Industronic voltage conditioner to protect the UPS and extend battery life
- Voltage Surge Suppressor



Modelo UPS-IND HF	1340 M1	1360 M1	1380 M1	13100 M1	13120 M1	13160 M1	13200 M1
Input							
Capacity (kw/ kVA)	40/40	60/60	80 / 80	100 / 100	120 / 120	160 / 160	200 / 200
Voltage (Vca)	120/208, 127/220, 220/380, 230/400, 254/440, 266/460, 277/480						
Overload Protection	Thermal magnetic input circuit breaker and thermal magnetic bypass circuit breaker						
Voltage Range (Vac)	+/- 20 % (Line to line)						
Phase	Three phase Wye, 3 phases + neutral + ground, optional: delta (3 phases + ground)						
Frequency Range (Hz)	40 - 70						
Input Power Factor	≥ 0.99 at full load						
THDi	≤ 3%						
Output							
AC to AC Maximum Efficiency	97%						
Overload Protection	Thermal magnetic output circuit breaker						
Output Power Factor	1.0						
Voltage (Vac)	120/208, 127/220, 220/380, 230/400, 254/440, 266/460, 277/480						
Voltage Regulation Range (Vac)	+/- 1%						
Frequency (Hz)	60 +/- 0.1% (battery mode), optional: 50 Hz						
Waveform	Pure sinusoidal wave						
Harmonic Distortion THDv	≤ 1% (Linear load), ≤ 4% (non linear load)						
Transfer Time (ms)	0.0 milisegundos (true on line)						
Connection Type	Three phase star, 3 phases + neutral + ground, optional: delta (3 phases + ground)						
Overload	101 a 105% continuous, 106 a 110% 60 minutes, 111 to 125% 10 minutes, 126 to 150% 60 seconds > 150% immediate switch to bypass						
Battery Bank							
Voltage (Vdc)	+/- 192 (+/- 168 a +/- 288 (adjustable)						
Battery Type	Lead acid (sealed & maintenance free)						
Full load backup time	5 standard (extended time available upon request)						
Maximum Load Current (A)	30			60			
Battery Bank	Internal	External					
Physical & Mechanical							
Audible Noise (dB)	< 65, at 1 meter						
Operating Temperature (°C)	0 to 40						
Relative Humidity	0 - 95% without condensation						
Maximum Operating Altitude (m.a.s.l.)	2,400 at 100%, 3000 at 96%						
Cabinet	Baked electrostatic Epoxy coated Steel						
Dimensions, height x width x depth (mm)	1600 x 950 x 1 000					1800 x 1100 x 1220	
UPS net weight (kg)	480	720	960	1100	1200	1460	1610
Technology							
Inverter	3 level IGBT technology for higher efficiency (PWM type)						
Rectifier	High Efficiency PFC type with IGBT technology						
Output Isolation Transformer	Optional						
Battery Status	Real Time Online/Discharge Information						
Thermal Dissipation (kBtu / h)	4.1	6.1	8.2	10.2	12.3	16.4	20.5
Internal Bypass	Two Bypass Modes: Automatic Static & Manual Bypass Switch for Maintenance						
Paralleling	N + 1 up to 8 units						
Certifications	CE-62040-1, CE 62040-2, ISO 9001:2015						
Communications Interface	RS485 + EPO, 5 dry contact output signals, 1 dry contact input, RS232, SNMP network card						
Digital Touch Screen	Displays: Input and output voltage, Load capacity, Battery voltage, Operating Status Mimic and LEDs Indicators						
Alarms	Low Battery, Abnormal Input, UPS Failure, etc.						
Protection	Low Battery, Overload, Short Circuit, Over Temperature, etc.						