

Giant iND



Applications:

Giant iND is suitable for industrial and facilities applications.



· Industrial process (and control system, industrial machinery, instrument and measurement, process monitoring and control, security and transport systems...)



· Infrastructures (Hospital, airport, semiconductor, water treatment, metallurgy)



· Energy industry (gas and oil, nuclear power)



· Military application

• True online double conversion with DSP control

Double conversion between input/output, battery and bypass are totally isolated power line noise, spikes and transients. A Digital Signal Processor (DSP) control provides an improved solution with high performance.

• Robust electrical performance to prevent damage from top and bottom connections

This UPS is designed to accept wide input voltage and frequency range to cope with the worst utility conditions. It can eliminate harmful distortion from utility power and withstand all kinds of severe impacts from various loads. It's capable to support heavy duty equipment, production equipment and DCS (Distributed Control System) system.

• Screwless cabinet design and fully coating PCBAs to withstand harsh environment

The outside cabinet is designed only with locks without any screws and all PCBAs are coated for anti-moisture, anti-electric leakage, anti-dust and anti-corrosion. Its robust design is suitable for harsh environment with high temperature, high humidity, dense dust, salt, or fierce vibration.



• Unique ventilation design for effective heat dissipation

Unique ventilation design allows heat to rise by the process of convection. Therefore, the UPS cabinets can be added in parallel side by side for space-saving.



• Flexible battery configuration adapts different applications

The number of batteries can be adjusted flexibly according to different power demands.

• Accepts dual-mains inputs

Giant iND series is allowed to connect two separate power inputs to increase operation reliability.

• Front access makes maintenance and replacement easy

It's considerate to allow easy access to all of the electronic cards and power components in the unit through the front panel for further maintenance and replacement.



• High short-circuit and overload

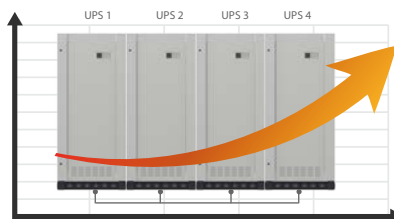
This UPS is built-in high short-circuit protection. Once short circuit occurs, this mechanism will be activated. The load will stay protected and the UPS will remain intact. High overload protection supports 110% for 60 minutes and 125% for 10 minutes.

• Easy integration into existing electrical networks or generator

During wiring connection, Giant iND can be accessible either from top or from bottom under different environmental conditions. Besides, this UPS is fully compatible with generator.

• Parallel capability up to 4 units

Up to 4 units in parallel can be operated without adding additional hardware, increasing system capacity as well as operation reliability for power redundancy.



Giant iND 3P/1P 220VDC Online UPS Selection Guide

MODEL	Giant iND 31-10K	Giant iND 31-15K	Giant iND 31-20K	Giant iND 31-30K	Giant iND 31-40K	Giant iND 31-60K	Giant iND 31-80K	Giant iND 31-100K	Giant iND 31-120K
CAPACITY	10KVA/8KW	15KVA/12KW	20KVA/16KW	30KVA/24KW	40KVA/32KW	60KVA/48KW	80KVA/64KW	100KVA/80KW	120KVA/96KW
INPUT									
Nominal Voltage	3 x 380VAC (3Ph + G or 3Ph + N + G)								
Acceptable Voltage Range	304VAC ~ 456VAC								
Frequency	50Hz ±5 Hz (±10%)								
OUTPUT									
Nominal Voltage	220VAC/230VAC/240VAC (Selectable)								
Connection Type	Hardwire 3-wire (1Ph+N+G)								
Waveform	Pure Sinewave								
Output Voltage Stability	Steady state	±1%							
	Transient state	±5%							
Frequency	50 Hz								
Frequency Stability	± 1%								
Frequency Synchronisation Range	± 5Hz (Equal to bypass working range)								
Frequency Synchronisation Speed	1~2 Hz/s								
Power Factor	0.8								
Crest Factor	3:1								
Total Harmonic Distortion (THDv)	<2% (Linear Load) <4% (Non-linear Load)								
Dynamic in-rush Voltage Range	0%>100%>0% (R Load) <±5% : 20%>100%>20% (R Load) ±3%								
Dynamic Recovery Time (III Grade)	0%~100% RCD load : <60 ms recover to 90% of nominal voltage								
Phase Displacement	120° ±1% (balanced load) 120° ±2% (imbalances 50% of the load)								
Transfer Time	0 ms								
Overload Capability	0% ~ 110% continuous running; 110% ~ 150% for 10 min~1 min; >160% for 200ms								
Short-circuit Capability	60~100ms								
Transient Response Time	< 5ms								
BYPASS									
Connection Type	Hardwire 3-wire (1Ph+N+G)								
Input Voltage Range	220VAC ± 25%								
Overload / Short-circuit capability	1.5 In~1.8 In 1h~30s								
	1.8 In ~ >2.0 In 30s~200ms								
SYSTEM									
Efficiency (@ linear load)	≥90%								
ECO Mode (Non-parallel models)	Yes								
EPO Function	Yes								
Standard	IEC 61000-4-5 Surge Protection, IEC 62040-2 EMC/EMI, IEC62040-1 Safety								
BATTERY & RECTIFIER									
Rectifier	Type	6 pulse				12 pulse			
	Rated output voltage	220 VDC							
	Charger voltage	216VDC ~ 243VDC (Adjustable)							
Battery	Charging current(max)	Default 10A, Maximum=Capacity / Battery Voltage				Default 10A, Maximum 40A			
	Type	Support VRLA Battery							
	Numbers	16 - 18 pcs (adjustable)							
	Reverse Diode	Yes							
	Cold Start	Yes							
PHYSICAL									
IP Protection	IP20 (Default), IP21/IP31 (Option)								
Dimensions, DxWxH (mm)	800 x 800 x 1800					800 x 1200 x 1800		800 x 1600 x 1800	
Net Weight (Kgs)	354	386	400	480	680	910	1010	1360	1620
ENVIRONMENT									
Operating Temperature	0~ 35°C continuous running, 40°C 8-hour running at nominal input voltage, recharging batteries and no overload, 45°C derating to 85% with linear load								
Operating Humidity	0~90% (non-condensing)								
Noise Level	Less than 70dB @ 1 Meter								
MANAGEMENT									
Modbus RS-232/RS485	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC								
Dry Contacts	6 outputs and 2 inputs								
Optional SNMP	Power management from SNMP manager and web browser								

Product specifications are subject to change without further notice.



Giant iND 3P/1P 384VDC Online UPS Selection Guide

SPECIAL INFO

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CAPACITY	10KVA / 8KW	15KVA / 12KW	20KVA / 16KW	30KVA / 24KW	40KVA / 32KW	60KVA / 48KW	80KVA / 64KW	100KVA / 80KW	120KVA / 96KW
INPUT									
Nominal Voltage	3 x 380VAC (3Ph + G or 3Ph + N + G)								
Acceptable Voltage Range	304VAC ~ 456VAC								
Frequency	50Hz ±5 Hz (±10%)								
OUTPUT									
Nominal Voltage	220VAC/230VAC/240VAC (Selectable)								
Connection Type	Hardwire 3-wire (1Ph+N+G)								
Waveform	Pure Sinewave								
Output Voltage Stability	Steady state	± 1%							
	Transient state	± 5%							
Frequency	50 Hz								
Frequency Stability	± 1%								
Frequency Synchronisation Range	± 5Hz (Equal to bypass working range)								
Frequency Synchronisation Speed	1~2 Hz/s								
Power Factor	0.8								
Crest Factor	3:1								
Total Harmonic Distortion (THDv)	<2% (Linear Load) <4% (Non-linear Load)								
Dynamic in-rush Voltage Range	0%->100%->0% (R Load) <±5% : 20%->100%->20% (R Load) ±3%								
Dynamic Recovery Time (III Grade)	0%~100% RCD load : <60 ms recover to 90% of nominal voltage								
Phase Displacement	120° ±1% (balanced load) 120° ±2% (imbalance 50% of the load)								
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Efficiency (@ linear load)	≥ 90%								
ECO Mode (Non-parallel models)	Yes								
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Standard	IEC 61000-4-5 Surge Protection, IEC 62040-2 EMC/EMI, IEC62040-1 Safety								
BATTERY & RECTIFIER									
Rectifier	Type	6 pulse							
	Rated output voltage	384 VDC							
	Charger voltage	395VDC ~ 435VDC (Adjustable)							
	Charging current(max)	Default 10A, Maximum=Capacity / Battery Voltage				Default 10A, Maximum 40A			
Battery	Type	Support VRLA Battery							
	Numbers	32 Pcs (29 ~ 32 pcs adjustable)							
	Reverse Diode	No							
	Cold Start	Yes							
PHYSICAL									
IP Protection	IP20 (Default), IP21/IP31 (Option)								
Dimensions, D x W x H (mm)	800 x 800 x 1800							800 x 1200 x 1800	
Net Weight (Kgs)	360	386	400	430	490	610	680	900	920
ENVIRONMENT									
Operating Temperature	0~ 35°C continuous running, 40°C 8-hour running at nominal input voltage, recharging batteries and no overload, 45°C derating to 85% with linear load								
Operating Humidity	0~90% (non-condensing)								
Noise Level	Less than 70dB @ 1 Meter								
MANAGEMENT									
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