



Giant iNDRobust Industry Online UPS

3-phase in/single phase out 10kVA-120kVA 3-phase in/3-phase out (384VDC) 10kVA-200kVA 3-phase in/3-phase out (480VDC) 100kVA-600kVA

- ► Robust Industry Online UPS
- ► True online double conversion with DSP control
- ▶ Robust electrical performance to prevent damage from top and bottom connections
- ► Screwless cabinet design and fully coating PCBAs to withstand harsh environment
- ▶ Unique ventilation design for effective heat dissipation
- ► Front access makes maintenance and replacement easily
- ▶ Flexible battery configuration adapts different applications
- ► Accepts dual-mains inputs
- ► High short-circuit and overload capabilities
- ▶ Easy integration into existing electrical networks or generator
- ► Parallel capability up to 4 units

True online double conversion with DSP control Double isolation between input/output, battery and bypass is applied to totally isolate 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 eliminates 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 high temperature, high humidity, dusty, salty and vibrated of harsh environment







Unique ventilation design for effective heat dissipation

Unique ventilation design allows heat flowing to top as natural convection. Therefore, the UPS cabinets can be added in parallel side by side for space-saving.



• Flexible battery configuration adapts different applications

Battery numbers 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 easily

An important consideration has been given to allow generous access to the unit's electronic cards and power components. All the boards are accessible by front panel for easily maintenance and replacement.



High short-circuit and overload capabilities

This UPS is built-in high short-circuit protection. Once short circuit occurs, this protection device 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

Giant iND series is allowed for either top or bottom wiring connection depending on various environment condition. 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.



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

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

MODEL		Giant iND 31-10K	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	20KVA/16KW	30KVA/24KW	40KVA/32KW	60KVA/48KW	80KVA/64KW	100KVA/80KW	120KVA/96KW				
INPUT				1									
Nominal V	/oltage				3 x 380VAC (3Ph +	- G or 3Ph + N + G	;)						
	e Voltage Range					~ 456VAC	,						
Frequency						Hz (±10%)							
INVERTE					00112 10 1	12 (±1070)							
Nominal V					220VAC/230VAC/2	40VAC (Selectable	2)						
	-						=)						
Connectio	on Type					re (1Ph+N+G)							
Waveform	0	Pure Sinewave ±1%											
Output Voltage	Steady state												
Stability	Transient state					5%							
Frequency						Hz							
Frequency		± 1%											
Range	y Synchronisation	± 5Hz (Equal to bypass working range)											
Speed	y Synchronisation				1~2	Hz/s							
Power Fac	ctor	0.8											
Crest Fact						:1							
(THDv)	nonic Distortion	<2% (Linear Load) <4% (Non-linear Load)											
Range	n-rush Voltage			0%->100%->0	% (R Load) <±5% :	20%->100%->20	% (R Load) ±3%						
Dynamic F Grade)	Recovery Time (III	0%~100% RCD load : <60 ms recover to 90% of nominal voltage											
	splacement	120° ±1% (balanced load) 120° ±2% (imbalances 50% of the load)											
Transfer T	īme	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													
Connectio	n Type				Hardwire 3-wi	ire (1Ph+N+G)							
Input Voltage Range		220VAC ± 25%											
Overload (Capability	1.5 In~1.8 In 1h~30s											
Short-circu	uit Capability	1.8 ln ~>2.0 ln 30s~200ms											
SYSTEM													
Efficiency (At Linear	Load and 270VDC)	90%	91%	91%	91%	91%	92%	92%	92%				
ECO Mod (Non-para	e illel models)	Yes											
EPO Fund	ction	Yes											
Standard		IEC 61000-4-5 Protection surge, IEC 62040-2 EMC/EMI, IEC62040-1 Safety											
BATTERY	& CHARGER												
	Туре		6 pulse				12 pulse						
	Rated output voltage				220	VDC							
Rectifier	Charger voltage	220VDC ~ 270VDC (Adjustable)											
	Charging current(max)	20A	40A	40A	40A	40A	40A	40A	40A				
	Туре		1	1	Support VF	RLA Battery	1	1	1				
	Numbers					Pcs							
Battery	Reverse Diode					es							
	Cold Start					es							
PHYSICA													
IP Protecti					IP20 (Default) II	P21/IP31 (Option)							
		800 x 800 x 1800 800 x 1800 800 x 1200 x 1800 800 x 1600 x 1800											
Dimensions, D x W x H(mm) Net Weight (Kgs)		370 460 650 680 1000 1260 1360 1620											
		070 400 000 1000 1200 1300 1020											
Operating Temperature		0×40°C continuous running 45°C describe to 95% with linear lead											
Operating Temperature		0~ 40°C continuous running, 45°C derating to 85% with linear load											
Humidity		0~90% (non-condensing)											
Noise Lev					Less than 70	dB @ 1 Meter							
MANAGE													
	RS-232/RS485	Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC											
Dry Conta						and 2 inputs							
Optional S				Power mar	nagement from SNI	MP manager and v	veb browser						
Product spe	ecifications are subject	to change without to	further notice										



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

MODEL		Giant iND 31-10K	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	20KVA/16KW	30KVA/24KW	40KVA/32KW	60KVA/48KW	80KVA/64KW	100KVA/80KW	120KVA/96KW			
INPUT						1		'	l .			
Nominal V	/oltage	3 x 380VAC (3Ph + G or 3Ph + N + G)										
Acceptable	e Voltage Range					~ 456VAC						
Frequency						Hz (±10%)						
INVERTE		301 IL 20 1 IZ (1 10 /u)										
Nominal V					220VAC/230VAC/2	240VAC (Selectable	2)					
Connectio	-					· · · · · · · · · · · · · · · · · · ·	.,					
Waveform	л турс	Hardwire 3-wire (1Ph+N+G) Pure Sinewave										
Output	Steady state	±1%										
Voltage	Transient state		±5%									
Stability Frequency												
Frequency		50 Hz ± 1%										
	y Synchronisation	± 1%										
Range	y Synchronisation				± 5Hz (Equal to by	pass working range	e)					
	y Synchronisation				1~3	! Hz/s						
Speed												
Power Fac						0.8						
Crest Fact						3:1						
Total Harn (THDv)	nonic Distortion					near Load) -linear Load)						
	n-rush Voltage	<4% (Non-linear Load)										
Range		0%->100%->0% (R Load) <±5% : 20%->100%->20% (R Load) ±3%										
	Recovery Time (III	0%~100% RCD load : <60 ms recover to 90% of nominal voltage										
Grade)		<u>-</u>										
Phase Dis	placement	120° ±1% (balanced load) 120° ±2% (imbalances 50% of the load)										
Transfer T	īme	0 ms										
Overload (Capability	0% ~ 110% continuous running; 110% ~ 150% for 10 min~1 min; >160% for 200ms										
	uit Capability	60~100ms										
Transient Response Time		< 5ms										
BYPASS												
Connectio	n Type				Hardwire 3-w	rire (1Ph+N+G)						
Input Voltage Range		220VAC ± 25%										
	Capability	1.5 In~1.8 In 1h~30s										
	uit Capability	1.8 In ~>2.0 In 30s~200ms										
SYSTEM	an Supubinty				1.0 111 2.0	000 2000						
	(At Linear Load)				>	90%						
ECO Mod												
	illel models)	Yes										
EPO Fund	ction	Yes										
Standard		IEC 61000-4-5 Protection surge, IEC 62040-2 EMC/EMI, IEC62040-1 Safety										
BATTERY	& CHARGER											
	Туре	6 pulse										
	Rated output				38/	VDC						
Rectifier	voltage	384 VDC										
	Charger voltage				290VDC ~ 435	VDC (Adjustable)	I		I			
	Charging current(max)	20A	40A	40A	40A	40A	40A	40A	40A			
	Туре				Support V	RLA Battery						
	Numbers				32 Pcs (29 ~	32 adjustable)						
Battery	Reverse Diode					/es						
	Cold Start	Yes										
PHYSICA												
P Protecti					IP20 (Default). I	P21/IP31 (Option)						
Dimensions, D x W x H(mm)				800 x 8	00 x 1800	V-F7		800 x 120	00 x 1800			
Net Weight (Kgs)		360	400	430	490	610	680	900	920			
NVIRON												
	Temperature			0~ 40°C conti	nuous running, 45	°C derating to 85%	with linear load					
Humidity		0~ 40°C continuous running, 45°C derating to 85% with linear load 0~90% (non-condensing)										
Noise Level		Less than 70dB @ 1 Meter										
MANAGE					LC33 triail / (ALD GET INICION						
	RS-232/RS485			Supports Mind-	**************************************	N/ioto/2009/7/9 1:-	uv Univ and MAC					
		Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC 6 outputs and 2 inputs										
20,01	ICIS				o outputs	anu ∠ inputs						
Ory Conta Optional S				D	nagament f 01	MP manager and w	ab brows					

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

MODEL		Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND				
		33-10K	33-20K	33-30K	33-40K	33-60K	33-80K	33-100K	33-120K	33-160K	33-200K				
CAPACITY		10KVA/8KW	20KVA/16KW	30KVA/24KW	4UKVA/32KVV	60KVA/48KW	8UKVAV64KVV	TUUKVAV8UKW	12UKVAV96KVV	160KVAV128KV	V 200KVA/160KW				
INPUT	\/-#				0	200) (A C (2Db	N ODb + N	. 0)							
Nominal		3 x 380VAC (3Ph + N or 3Ph + N + G)													
	ole Voltage Range						~ 456VAC								
Frequen		50Hz ±5 Hz (±10%)													
INVERT		220VAC/230VAC/240VAC (Selectable)													
Nominal					220			able)							
Connecti		Hardwire 5-wire (3Ph+N+G)													
Waveform Output			Pure Sinewave ±1%												
Voltage	Steady state														
Stability	Transient state						5%								
	Frequency Frequency Stability		50 Hz ± 1%												
	cy Synchronisation	± 5Hz (Equal to bypass working range)													
Range	cy cyricinonisation				± 5	Hz (Equal to by	bass working ra	ange)							
	cy Synchronisation	1~2 Hz/s													
Speed															
Power Fa							.8								
Crest Fa							:1								
(THDv)	monic Distortion		<2% (Linear Load) <4% (Non-linear Load)												
Range	in-rush Voltage		-	0%	->100%->0% (R Load) <±5%	20%->100%->	20% (R Load)	±3%						
(III Grade	Recovery Time		0%~100% RCD load : <60 ms recover to 90% of nominal voltage												
	isplacement		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													
	t Response Time					< 5	ims								
BYPASS															
Connection Type		Hardwire 5-wire (3Ph+N+G)													
	tage Range	220VAC ± 25%													
	I Capability	1.5 In~1.8 In 1h~30s 1.8 In~>2.0 In 30s~200ms													
	cuit Capability					1.8 ln ~ >2.0 l	n 30s~200ms								
SYSTEM		000/	040/	0.10/	0.40/	0.40/	000/	000/	000/	000/	200/				
ECO Mo	y (At Linear Load)	90%	91%	91%	91%	91%	92%	92%	92%	88%	88%				
	allel models)	Yes													
EPO Fur		Yes													
Standard	I	IEC 61000-4-5 Protection surge, IEC 62040-2 EMC/EMI, IEC62040-1 Safety													
BATTER	Y & CHARGER														
	Туре		6 pulse 12 pulse												
	Rated output					384	VDC								
Rectifier	voltage							`							
	Charger voltage					395VDC ~ 435\	/DC (Adjustable	e)							
	Charging current(max)	20A 40A 40A 40A 40A 40A 40A 50A 50A									50A				
	Туре						RLA Battery								
Battery	Numbers					· · · · · · · · · · · · · · · · · · ·	32 adjustable)								
	Reverse Diode						es								
BIDGE	Cold Start					Y	es								
PHYSIC						D00 (D 1	204 // 120 : 12								
IP Protec		IP20 (Default), IP21/IP31 (Option) 800 x 800 x 1800 800 x 1200 x 1800 800 x 1600 x 1800													
Dimensions, D x W x H(mm)		250	420			720	700								
Net Weight (Kgs)		350 420 450 480 730 790 1000 1300 1400 1700													
ENVIRONMENT															
Operating Temperature		0~ 40°C continuous running, 45°C derating to 85% with linear load													
Humidity Noise Level		0~90% (non-condensing)													
						Less than 70	dB @ 1 Meter								
MANAG	RS-232/RS485	Supports Mindows@ 2000/2002/VDA Fets /2009/7/0 Linus Hairs and MAC													
		Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC													
Dry Cont					D		and 2 inputs	and a constant							
Optional		at tales and a second	hand foot		Power manag	ement from SN	vır manager aı	nd web browser							
roduct st	pecifications are subje-	ct to change wit	nout further notic	e											



Giant iND 3P/3P 480VDC Online UPS Selection Guide

MODEL		Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND	Giant iND			
CAPACITY		33-100K 100KVA/90KW	33-120K 120KVA/108KW	33-160K 160KVA/144KW	33-200K 200KVA/180KW	33-250K 250KVA/225KW	33-300K 300KVA/270KW	33-400K 400KVA/360KW	33-500K 500KVA/450KW	33-600K 600KVA/540K\			
INPUT		1001107001117	1201111111001111	10011071111111	2001177100117	200111112201111	OGGITTI TETOTOT	1001111110001111	0001177100117	0001117101011			
Nominal \	/oltage				3 x 380VAC	/400VAC/415VA	C (3Ph + G)						
	le Voltage Range					04VAC ~ 456VA							
requenc						45Hz ~ 65Hz							
NVERTE													
Nominal \			380VAC/400VAC/415VAC (Selectable)										
Connectic						vire 5-wire (3Ph-	-						
Vaveform					110.0	Pure Sinewave							
Output	Steady state	±1%											
oltage stability	Transient state					± 5%							
requenc					50 H:	or 60 Hz (Selec	table)						
	y Stability	± 0.05%											
Frequency Synchronisation													
Range		± 5Hz (Equal to bypass working range)											
requency speed	y Synchronisation					1~2 Hz/s							
ower Fa	otor					0.9							
rest Fac						3:1							
	monic Distortion					1% (Linear Loa	d)						
THDv)						% (Non-linear Loa							
	in-rush Voltage				0%->	100%->0% load	: ≤1%						
Range	Recovery Time		0%->100%->0% load : ≤1%										
III Grade		0%~100% RCD load : <20 ms recover to 90% of nominal voltage											
hase Dis	splacement	120° ±1%											
Transfer Time		0 ms											
Overload Capability		110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, 200% for 7 seconds											
hort-circ	uit Capability	180% for 1 second											
Transient Response Time		<10ms											
SYPASS													
Connectio	on Type				Hard	vire 5-wire (3Ph-	+N+G)						
Input Voltage Range		220VAC ± 15% (setting range ±10% ~ ±25%)											
Overload Capability		110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute											
hort-circ	uit Capability	1 second (Rated x 7), 500 ms (Rated x 8), 200 ms (Rated x 9), 100 ms (Rated x 10), 100 ms (Rated x 14)											
YSTEM													
fficiency	(At Linear Load)	93%	93%	93.5%	93.5%	93.5%	93%	93%	93%	93%			
CO Mod						Yes							
	allel models)												
PO Fund	ction	Yes											
Standard					IEC 6052	9, IEC 60664, IE	EC 60755						
BATTERY	/ & CHARGER												
	Туре	IGBT											
	Rated output voltage	480 VDC											
Rectifier	Charger voltage		524VD	C ~ 576VDC (Adj	ustable)			542VDC ~ 576\	/DC (Adjustable)				
	Charging	20A	24A	32A	40A	50A	50A	70A	70A	70A			
	current(max)	ZUA	24A	J2A				/ UA	/ UA	TUA			
	Туре					pport VRLA Batt							
Battery	Numbers				40 Pc	s (40 ~ 43 adjus	table)						
,	Reverse Diode	No											
	Cold Start					Yes							
PHYSICA													
Protect				I		IP20 (Default)							
Dimensions, D x W x H(mm)			00 x 1900		350 x 1000 x 190			500 x 1900		00 x 1900			
Net Weight (Kgs)		656	700	800	910	1000	1400	1700	2100	2400			
NVIRON													
	Temperature	0~ 40°C continuous running, 45°C derating to 85% with linear load											
Humidity		0~90% (non-condensing)											
loise Lev					Less th	an 65~70dB @	1 Meter						
MANAGE													
	RS-232/RS485			Supports W	indows® 2000/2			nix, and MAC					
ry Conta						utputs and 2 inp							
Optional S				Powe	er management t	rom SNMP man	ager and web br	owser					
•	ecifications are subjec	t to change withou	it further notice	FUW	or management	OH ONNE HIGH	ager and WED DI	O++3CI		_			