





SOLAR ENERGY

Extracting sustainable power
from sunlight



OUR STORY

ONYXLINE DISTRIBUTION LTD,
Established in 1998. Our headquarter
Based in Dubai, United Arab Emirates,
which is a professional hi-tech company
specialized in Power Products and
Networking Solution, installation and
After-Service.

We have 12 branches with official
distributors in more than 70 countries
all over the globe including our branch
in Lagos, Nigeria which is leading and
covering the market of West African
Countries.

Our established partnerships with top
industry brands allow us to provide the
most effective, superior assemblies and
supply a range of accessory products
worldwide.

Our products have become synonymous
with technological innovation, build quality
and unparalleled customer service and
are highly spoken of by our customers.



QR CODE

OnyxLine

Onyxline is a global leader in the solar energy market with business units focused on global equipment supply services and project development. We offer a full-service portfolio for all solar projects, including procurement, engineering, project development, and construction services.

OFF-GRID SOLAR INVERTER

Alpha 2KVA

FEATURES

- Pure sinewave solar inverter
- Output power factor : 0.8
- 12V system
- Maximum PV array power 2000W
- MPPT range operation voltage 30-400VDC
- Maximum charging current 80A



SPECIFICATIONS

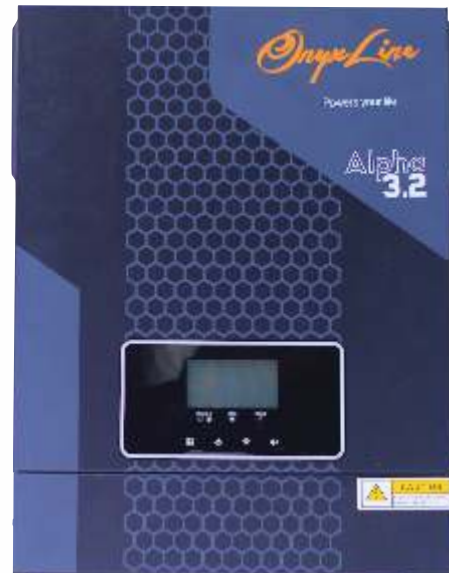
Brand	Onyxline
Model name	Alpha 2KVA
Model Number	Ony-I-A1.6-12
Rated Power	2000VA/1600W
AC Input Voltage	230VAC
Selectble voltage	Computers (170-280VAC)/ Appliances (90-280VAC)
Frequency range	50/60Hz (Auto sensing)
AC Output	
AC Voltage regulation	230VAC +/- 5%
Surge power	4000VA
Effeciency Peak	98%
Transfer time	10ms
Battery & AC charger	
Battery voltage	12VDC
floating charge	13.5VDC
Overcharge protection	16VDC
Maximum Ac charge current	60A
Solar charger	
Maximum Pv Array power	2000W
MPPT range operation voltage	30-400VDC
Max PV array open cercuit	400VDC
Maximum charging current	80A

OFF-GRID SOLAR INVERTER

Alpha 3.2KVA - 3KW

FEATURES

- Pure sinewave solar inverter
- Output power factor : 0.8
- 24V system
- Maximum PV array power 3000W
- MPPT range operation voltage 30-400VDC
- Maximum charging current 80A



SPECIFICATIONS

Brand	Onyxline
Model name	Alpha 3.2KVA
Model Number	Ony-i-A3.0-24
Rated Power	3200VA/3000W
AC Input Voltage	230VAC
Selectable voltage	Computers (170-280VAC)/ Appliances (90-280VAC)
Frequency range	50/60Hz (Auto sensing)
AC Output	
AC Voltage regulation	230VAC +/- 5%
Surge power	6400VA
Effeciency Peak	98%
Transfer time	10ms
Battery & AC charger	
Battery voltage	24VDC
Floating charge	27VDC
Overcharge protection	33VDC
Maximum Ac charge current	60A
Solar charger	
Maximum Pv Array power	3000W
MPPT range operation voltage	30-400VDC
Max PV array open cercuit	400VDC
Maximum charging current	80A

BETA 4.2

FEATURES

- Pure sinewave inverter
- Output power factor:1
- Battery independent design
- RGB lighting for different operation modes
- OFF/ON Grid Operation types
- Built-in 120/140Ah solar charger



SPECIFICATIONS

Model name	Beta 4.2KW	Beta 6.2KW
Model number	ONY-4.2-24	ONY-6.2-48
Max PV input Power	6200	6500
Rated output power	4200	6200
Maximum solar charger power	140A	120A
	Grid Tie operation / PV input (DC)	Grid Tie operation / PV input (DC)
Nominal DC voltage/Max DC voltage	360VDC/500VDC	360VDC/500VDC
Start up Voltage / Initial feeding voltage	90VDC/120VDC	90VDC/120VDC
MPPT voltage range	90-450VDC	90-450VDC
Number of MPPT trackers / Max input current	1/27A	1/27A
Grid output (AC)		
Nominal output voltage	220/230/240VAC	220/230/240VAC
output voltage range	195-235VAC	195-235VAC
Nominal output current	18.2A	27A
Power factor	0.99	>0.99
Feed-in Grid frequency range	49Hz to 51Hz	49Hz to 51Hz
Efficiency	97%	97%
	Off-Grid operation / AC input	Off-Grid operation / AC input
AC startup voltage / Auto restarting voltage	120-140V	180V
Acceptable input voltage range	90-280VAC/ 170-280VAC	90-280VAC/ 170-280VAC
Maximum AC input Current	30A	40A
Nominal operating frequency	50/60Hz	50/60Hz
Surge power	8400VA	12400VA
	Off-Grid operation / PV input(DC)	Off-Grid operation / PV input(DC)
Maximum DC voltage	500VDC	500VDC
MPPT voltage range	90-450VDC	90-450VDC
Number of MPPT trackers / Max input current	(1/27)	(1/27)
	Battery mode output AC	Battery mode output AC
Nominal output voltage	24V	48V
Output wave form	Pure Sinewave	Pure Sinewave
Efficiency (DC to AC)	94%	94%
Battery & charger		
Nominal DC voltage	24V	24V
Maximum solar charger current	140A	120A
Maximum AC charging current	100A	100A
	Physical features	Physical features
Dimensions (D*Y*H)	420* 310 * 110	420* 310 * 110
Net Weight (KGs)	9.5	10.5
Interface	Serial connection	serial connection
Communications	RS- 232	RS- 232
Humidity	0-90%	0-90%
Operating temperature	(-10 to 50)	(-10 to 50)

FEATURES

- Pure sine wave output & Dual AC output
- Self-consumption and feed-in to the grid
- Built-in MPPT solar charger
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Detachable LCD panel
- Built-in WiFi for mobile monitoring (APP is available)
- Supports USB on-the-go function
- Reserve BMS communication
- Parallel operation up to 9 units.



SPECIFICATIONS

Model name	GAMMA 6K
Model number	ONY-1-G6-48
POWER RATE	
Maximum PV Input Power	6000W
Rated Output Power	6000W
GRID-TIE OPERATION / PV input DC	
Power Rate	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120 VDC / 150 VDC
MPPT Voltage Range	120 VDC~150 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID-TIE OPERATION / GRID OUTPUT (AC)	
Nominal Output Voltage	220 / 230 / 240 VAC
Output voltage range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
GRID-TIE OPERATION / EFFICIENCY	
Maximum Conversion Efficiency(DC/AC)	95%
OFF-GRID OPERATION / AC INPUT	
ACStart-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
Maximum AC Input Current	40 A
OFF-GRID OPERATION / PV INPUT (DC)	
Maximum DC Voltage	500 VDC
MPPT Voltage Range	120 VDC~430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
OFF-GRID OPERATION / BATTERY MODE OUTPUT (AC)	
Battery Mode Output (ac)	220/230/240 VAC
Output Waveform	Pure Sine Wave
Efficiency (DC to AC)	93%
HYBRID OPERATION / PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPPT Voltage Range	120 VDC~430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
HYBRID OPERATION / GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
HYBRID OPERATION / AC INPUT	
ACStart-up Voltage / Auto Restart Voltage	120 - 140VAC / 180 VAC
Acceptable Input Voltage Range	90-280VAC or 170 - 280 VAC
Maximum AC Input Current	40A
HYBRID OPERATION / BATTERY MODE OUTPUT	
Nominal Output Voltage	220/230/240 VAC
Efficiency (DC to AC)	93%
HYBRID OPERATION / BATTERY & CHARGER	
Nominal DC Voltage	48V
Maximum Solar Charging Current	120A
Maximum AC Charging Current	120A
Maximum Charging Current	120A
GENERAL / PHYSICAL	
Dimensions D x W x H (mm)	140 x 295 x 468
Net Weight	14KG
GENERAL / INTERFACE	
Parallel function	Built in Parallel kit up to 9 units
Communication Port	USB, RS-232, Dry Contact and WiFi
GENERAL / ENVIRONMENT	
Humidity	0~90%RH (No Condensing)
Operating Temperature	-10°C to 50°C

DELTA 8.2

FEATURES

- Operation Type: Off-Grid/On-Grid
- Sinewave Type: Pure, Power Factor 1.0
- Dual AC output for smart load management
- Wide PV input voltage range (90-450VDC)
- Built-in WiFi with IOS & Android App.
- Battery Independent Design
- With Parallel Kit Supports up to 6 Units
- RGB Lighting for different working modes (Battery, Solar, Utility)



SPECIFICATIONS

Model name	DELTA 8.2
Model number	ONY-I-D8.2-48
Rated Power	8200VA/8200W
PARALLEL CAPABILITY	Yes, up to 6 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC(For Personal Computers)/ 90-280 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230VAC \pm 5%
Surge Power	16400VA
Efficiency (Peak)	90%~93%
Transfer Time	15 ms (For Personal Computers) ; 20 ms (For Home Appliances)
Waveform	Pure sine wave
No Load Power Consumption	<70W
DC Voltage (Optional)	12 VDC + 5%, 100W
BATTERY	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Maximum PV Array Power	8200W (4100W x 2)
MPPT Range @ Operating Voltage	90-450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC
Maximum Solar Charge Current	120 A
Maximum AC Charge Current	120 A
Maximum Charge Current	120 A
PHYSICAL	
Dimension, D x W x H (mm)	147.4 x 432.5 x 553.6
Net Weight (kgs)	18.4
Communication interface	USB/RS232/RS485 /WiFi/Dry-contact
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C
Compliance Safety	CE

ONYXLINE 10KW-15KW

WITH ENERGY STORAGE

FEATURES

- Self-Consumption and feed-in to the grid.
- Programmable supply priority for PV, Battery or Grid
- Users-adjustable battery charging current suits different types of batteries
- Programmable multiple operations modes: Grid tie, Off grid and grid-tie with backup.
- Multiple communication for USB, 232, Modbus and SIMP
- Monitoring software for real time status display and control
- Custom-made firmware by ODM contract
- Parallel operation up to 6 units



SPECIFICATIONS

Model name		
Model number	10KV	15KV
Phase	3-phase in / 3-phase out	
Maximum PV Input Power	14850 W	22500 W
Rated Output Power	10000 W	15000 W
Maximum Charging Power	9600 W	15000 W
GRID- TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
MPPT Voltage Range	400 VDC~800 VDC	400 VDC~800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.65A; B: 18.6A
GRID OUTPUT (AC)		
230 VAC (P-N) / 400 VAC (P-P)		
Nominal Output Voltage		
Output Voltage Range	184 - 265VAC* per phase	184 - 265VAC* per phase
Nominal Output Current	14.5A per phase	21.7A per phase
Power Factor		>0.99
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)		96%
European Efficiency@ Vnominal		95%
OFF GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC/ 180 VAC per phase	120 - 140 VAC/ 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase	170 - 280 VAC per phase
Maximum AC Input Current	40 A	40 A
PV INPUT (DC)		
Maximum DC Voltage	900 VDC	900 VDC
MPPT Voltage Range	400 VDC~800 VDC	400 VDC~800 VDC
Number of MPP Trackers/Maximum Input Current	2 / 2 x 18.6A	2 / 2 x 18.6A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
	Pure Sinewave	
Efficiency (DC to AC)	91%	91%
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
MPPT Voltage Range	400 VDC~800 VDC	400 VDC~800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.65A; B: 18.6A
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC* per phase	184 - 264.5 VAC* per phase
Nominal Output Current	14.5 A per phase	21.7A per phase
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC Per Phase / 180 VAC per phase	120-140VAC (P-P) / 180 VAC (P-P)
Acceptable Input Voltage Range	170 - 280 VAC per phase	170 - 280 VAC per phase
Maximum AC Input Current	40A	40A
BATTERY MODE OUTPUT (AC)		
Nominal DC Voltage Default 60A, 10A - 200A (Adjustable)	230 VAC (P-N) / 400 VAC (P-P)	230 VAC (P-N) / 400 VAC (P-P)
Maximum Charging Current	91%	91%
BATTERY & CHARGER		
Nominal DC Voltage	48 VDC	
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)	Default 60A, 10A - 200A (Adjustable)
GENERAL/PHYSICAL		
Dimension, D x W x H (mm)	167.2 x 500 x 622	219 x 650 x 820
Net Weight (kgs)	40	62
INTERFACE		
Communication Port	RS-232/USB	RS-232, USB and Dry Contact
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available	
ENVIRONMENT		
Humidity	0~90% RH (Non Condensing)	
Operating Temperature	-10 to 55°C	
Altitude	0 ~ 100m"	

ONYXLINE 30KW

WITH ENERGY STORAGE

FEATURES

- IP65 waterproof and dustproof makes the inverter available for various working conditions
- 150% unbalanced load support
- Dual output for smart load management
- Built-in Wi-Fi for mobile monitoring (App is available)
- User-adjustable charging current up to 50A
- Wide Battery input range
- Built-in communication port for BMS (RS485)
- Parallel Operation Up To 4 Units



SPECIFICATIONS

Model name	
MAXIMUM PV INPUT POWER	40000 W
RATED OUTPUT POWER	30000 W
MAXIMUM CHARGING POWER	18000 W
GRID- TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage /Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPPT Voltage Range	350 VDC~900 VDC
Number of MPP Trackers / Maximum Input Current	3 / A: 26A; B: 26A, C: 2
Number of MPP Strings Per MPPT Tracker	A: 2, B: 2, C:2
GRID/ UTILITY OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 264.5VAC per phase
Nominal Output Current	43.5A per phase
Power Factor	0.9 lag to 0.9 lead
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	96.5%
European Efficiency@ Vnominal	96%
OFF GRID OPERATION	
AC INPUT	
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	50A
AC INPUT (DC)	
Maximum DC Voltage	100 VDC
MPPT Voltage Range	350 VDC~900 VDC
Number of MPP Trackers / Maximum Input Current	3 / A: 26A; B: 26A, C: 26A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure Sinewave
Efficiency (DC to AC)	96%
HYBRID OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	1000 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPPT Voltage Range	350 VDC~900 VDC
Number of MPP Trackers/Maximum Input Current	3 / A: 26A; B:26A, C:26A
GRID OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 264.5 VAC*per phase
Nominal Output Current	43.5A per phase
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	50 A
BATTERY MODE OUTPUT(AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	96%
BATTERY & CHARGER	
Nominal DC Voltage	500-1000 VDC
Maximum Charging Current	50A
GENERAL	
PHYSICAL	
Dimension D x W x H (mm)	255 x 660 x 750
Net Weight (kgs)	73
INTERFACE	
Communication Port	RS-232, USB, DRY CONTACT, RS-485 and Wi-Fi
Intelligent Slot	Optional SNMP, MODBUS and GPRS
ENVIRONMENT	
Humidity	0~100% RH
Operating Temperature	-25°C to 60°C (>45°C De-rating)
Altitude	0~100m"

OnyxLine

VFD

Solar Pumping Inverter

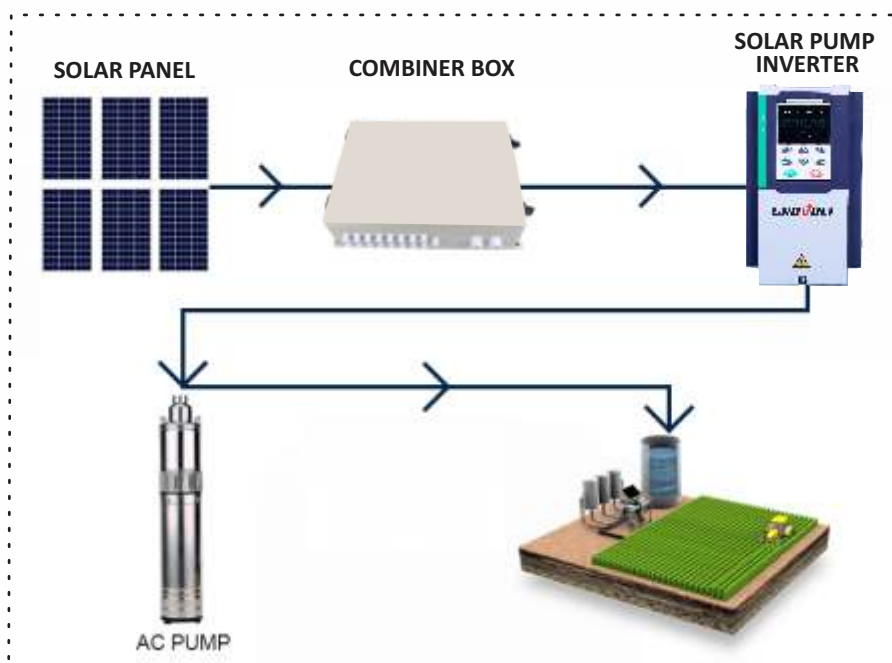
FEATURES

- Automatic hibernation and wake up
- Advance calculation for pump flow and LCD monitoring display
- Dual Supply capability with changeover switch-solar and grid compatible
- Maximizing power generation efficiency of solar modules with the use of advanced MPPT control technology and automatic MPPT voltage tracking



SPECIFICATIONS

VOLTAGE	220V	380V
Max inputDC voltage	450V	800V
Recommended MPPT voltage range		
Recommended input voltage	305V	530V
MPPT efficiency	99%	
input channel	2	
Rated output voltage	3-phase 220VAC	3-phase 220VAC
Output frequency rage	0~60Hz	
Max efficiency of the machine	97%	
Ambient temperature range	-10°C 50°C, derating if the temperature is above 40°C	
Cooling method	Air cooling	
Protection degree	Ip20	
Altitude	Below 1000m; above 1% for every additional 100m.	
Standard	CE	



Powerwall Lithium

Grade A

FEATURES

- Cycle life: 4000 cycles @ 80% DOD, 0.5C
- Monitoring: WLAN function/Optional
- Certificates
Pack: UN 38.3, MSDS
Cell: UN 38.3, MSDS, IEC62619, CE, UI1973, UI2054
- Rate capacity (AH): 200
- Warranty : 40 months



SPECIFICATIONS

LiFePO4 Battery		
SPEC	MODEL	ONY -BAT -A-51.2
	Rate voltage (Vdc)	51.2
	Cell combination	16S2P
Electrical Characteristics	Rate capacity(AH)	200
	Energy storage(KWH)	10.24
	Cycle life	4000 cycles @80% DOD, 0.5C
	Months self discharge	≤ 2%
	Charge Voltage	58.4V
	Max. Charge current(A)	100
Charge/Discharge	Max. Discharge current(A)	100
Standard	Discharge cut-off voltage(VDC)	40
	Charge cut-off voltage(VDC)	59
	Charge temperature	0~50
Environment	Discharge temperature	(-20~60)
	Storage temperature	(0~60)
	IP class	Ip21
	Material system	LiFePO4
	Case Material	Metal
	Case Type	Wall Mount
Mechanical	Pack Dimension L*W*H(mm)	800*500*185
	Package Dimension L*W*H(mm)	850*570*285
	Net Weight (kg)	89
	Gross Weight(kg)	98
Communication	Protocol(Optional)	CANBus/RS485/RS232
	Monitoring	WLAN function / Optional
	Warranty	40 Months

Powerwall Lithium

Grade A Premium

FEATURES

- Cycle life: 6000 cycles @ 80% DOD, 0.5C
- Monitoring: WLAN function/Optional
- Certificates
Pack: UN 38.3, MSDS
Cell: UN 38.3, MSDS, IEC62619, CE, UI1973, UI2054
- Rate capacity (AH): 200
- Warranty : 5 Years



SPECIFICATIONS

LiFePO4 Battery		
SPEC	MODEL	ONY -BAT -AP-51.2
	Rate voltage (VDC)	51.2
	Cell combination	16S2P
Electrical Characteristics	Rate capacity(AH)	200
	Energy storage(KWH)	10.24
	Cycle life	6000 cycles @80% DOD, 0.5C
	Months self discharge	≤ 2%
	Charge Voltage	57.6V
	Max. Charge current(A)	100
Charge/ Discharge	Max. Discharge current(A)	100
Standard	Discharge cut-off voltage(VDC)	43.2
	Charge cut-off voltage(VDC)	58.4
	Charge temperature	0° C to 55 C @ 60±25% Relative Humidity
Environment	Discharge temperature	-25° C to 55 C @ 60±25% Relative Humidity
	Storage temperature	-20° C to 55 C @ 60±25% Relative Humidity
	IP class	Ip21
	Material system	LiFePO4
	Case Material	Metal
	Case Type	Wall Mount
Mechanical	Pack Dimension L*W*H(mm)	680*485*226
	Package Dimension L*W*H(mm)	850*570*285
	Net Weight (kg)	89
	Gross Weight(kg)	98
Communication	Protocol(Optional)	CANBus/RS485/RS232
	Monitoring	WLAN function / Optional
Certificates	Pack	UN38.3, MSDS
	Cell	UN38.3, MSDS, IEC62619, CE, UL 1973 UL2054

GROVOLT

Grovolt is one of the best brands which is providing solar system, such as inverter batteries, solar panels, solar street light with warranty, installation and after sales service.

Ricco plus

FEATURES

- Pure sine wave Inverter
- Inbuilt With Transformer which is a strong load ability.
- Wide charge current 20-30A
- High-efficiency design & Power saving mode to conserve energy.
- Auto-restart when Ac recovering



SPECIFICATIONS

Model name	RP-2500	RP-3500 & Rp3548	RP-5000	RP-8000	RP-10000				
Input									
Capacity	2500VA	3500VA	5000VA	8000VA	10000VA				
Voltage (DC)	12/24/48V	24/48V	24/48V	48V	48V				
Nominal Voltage	220VAC/110VAC								
Voltage Range	154-265VAC/77-135VAC								
Frequency	50-60Hz Auto sensing								
Output									
Watt	800W	1200W	2000W	2800W	4000W	4800W	5200W	6400W	8000W
Voltage	220VAC/110VAC								
Frequency	50/60HZ								
Waveform	Pure Sinewave								
Transfer time (AC to DC)	<8ms								
Transfer time (DC to AC)	<8ms								
Output voltage regulation	10%rms								
Bypass Mode	Yes								
Saver Mode	Yes								
Efficiency	>98%								
Protection									
Input Protection	Circuit Breaker								
Output Protection	Circuit Breaker								
Battery									
Battery Type	AGM-Dep Cycle, GEL								
Charging current	Up to 500Ah								
Low Level disconnect	20/10A	30/15/7A	48/24/12A	30/15A	40/20A	45/22A	50/25A	35A	50/25/12A
	(10V or 10.5V)x N								
	N means the number of batteries in series								
LCD Indicator status	Input AC, Output AC								
	Battery DC, Output Load								
	Alarm, Fault								
	Battery Charge Level								
	Output Frequency								
LED Indicator status	AC Line in:Green								
	Inverter:Green								
	Charging:Yellow								
	Alarm:Red								
Battery low alarm	battery light discharge 11.5V*N; battery load discharge 11.5V*N@load<20% 11V*N@load>50% / 10.5V*N@load>50%								
Battery low recovery	battery light discharge 11.5V*N; battery load discharge 11.5V*N@load<20% 11.5V*N@load>50% / 11V*N@load>50%								
DC low voltage shutdown	battery light discharge 11.5V*N; battery load discharge 11.5V*N@load<20% 10.5V*N@load>50% / 10.5V*N@load>50%								
DC high voltage alarm & fault	16V*N								
DC high voltage recovery	15V*N								
Alarm									
Low battery alarm	Audible alarm-1 beeping per second								
Overload alarm	Audible alarm-continous beeping								
fault	Audible alarm-continous beeping								
Environment									
Temperature	0-40								
Humidity	C0-95% Non condensing								
fault	>55db								

FEATURES

- Support Lithium battery
- Support RS232 for WIFI (optional)
- Pure sine wave output
- Powerful Charge Rate Up to 90AMP
- DC Start & Automatic Self-Diagnostic Function
- High Efficiency Design & "Power Saving Mode" to Conserve Energy
- Auto restart when Ac in recovering
- Smart battery charger design for optimized battery performance
- Selectable charging current based on applications
- AC input/DC input/Solar input optional priority
- Built-in Transformer
- Wall-Mounted



SPECIFICATIONS

Model	GA1512A	GA2024A	GA3024A	GA5048A	GA6024A	GA10048A
Capacity(VA)	1500VA	2000VA	3000VA	5000VA	6000VA	10000VA
Input Voltage(DC)	12V	12/24V	24V	48V	24V	48V
Nominal Voltage	220VAC					
Voltage Range	154-265VAC (AC Model);185-264VAC±3V(UPS Model)					
Frequency	50-60HZ Auto sensing					
Power Factor	0.8					
Rated Power	1200W	1600W	2400W	4000W	4800W	8000W
Voltage	220VAC					
Frequency	50/60HZ					
Waveform	Pure Sine Wave					
Transfer Time (AC to DC)	<8ms					
Transfer Time (DC to AC)	<8ms					
Output Voltage Regulation	±10%					
Bypass Mode	Yes					
Saver Mode	Yes					
Efficiency	>98%					
Input Protection	Circuit Breaker					
Output Protection	Circuit Breaker					
Battery Type	AGM-Deep Cycle ,Gel/Up to 500Ah					
Charging Current	30A	20A	30A	21A	60A	42A
Low Level disconnect (Selectable)	10V or 10.5V	20V or 21V		40V or 42V	20V or 21V	40V or 42V
PWM(Optional) controller Voltage	15VDC-30VDC		30VDC-60VDC			
MPPT(Optional) controller Voltage	15VDC-30VDC			30VDC-60VDC		
Maximum PV array power	400W	1600W		3200W	1600W	3200W
Maximum PV array open circuit voltage	PWM:50VDC	PWM:105VDC, MPPT:150VDC		PWM:150VDC, MPPT:150VDC		MPPT:150VDC
Maximum solar charge current	30A	60A		100A		
Protections	Over load, over temp, over charging, battery low, battery reverse connect, high AC voltage etc.					
LCD indicator status	AC input voltage, AC input frequency, PV voltage, PV current , Output Voltage, Output Frequency, Battery voltage, Load current etc.					
LED indicator status	AC Line In:Green/Inverter:Green/Charging :Yellow/Alarm :Red					
LOW battery alarm	Audible alarm-5 seconds beeping					
Overload alarm	Audible alarm- continuous beeping					
Fault	Audible alarm- continuous beeping					
Temperature	0-40C					
Humidity	-10C~90C Non Condensing					
Accoustic Noise (db)	>55dB					
Size L*W*H(mm)	325*263*123MM			470*335*210MM		
Weight	14.5	17	19.5	25.3	29	40

RAGNAR 11

FEATURES

- Dual outputs for smart load management
Maximum PV input current up to 27A
- Wide PV input voltage range (90-450VDC)
- Battery-in 150A MPPT Solar charger
- Built-in Wi-Fi with IOS & Android App
Smart battery charger design
Built-in parallel kit support parallel up to 6units
- RGB lighting for different working modes
Supports USB On-the-Go function
- Selectable high power charging current
- Built-in DC output for DC fan, LED bulb, router (NEW)



SPECIFICATIONS

Model name	Ragner 11kw
Model Number	Model Number
Maximum PV Input Power	11000W
Rated Output Power	11000W
AC INPUT	
Nominal Input Voltage	230VAC
Selectable Input AC Voltage range	170-280VAC (Computers)/90-280VAC (Appliances)
Frequency range	50Hz/60Hz (Auto sensing)
AC OUTPUT	
AC Voltage Regulation (Battery Mode)	230VAC +/-5%
Surge Power	22000W
Efficiency	93%
Transfer Time	10ms for computers/20ms for Appliances
Output voltage waveform	Pure Sinewave
Optional DC voltage	12VDC +/-5% (100W)
BATTERY	
Battery Voltage	48VDC
Floating charge voltage	54VDC
Overcharge protection	63VDC
SOLAR / CHARGING MODE	
Solar charger type	MPPT
Maximum PV array open circuit voltage	11000W (2*5500)
Maximum PV input current	500VDC
Maximum solar charging current	150A
Maximum AC solar charging current	150A
Maximum AC solar charging current	150A
PHYSICAL	
Dimensions (D*W*H)mm	158.4*503.6*530.8
Communications Interface	USB/RS232/RS485/Wi-Fi/Dry Contact
Net weight (Kgs)	20 Kgs
Gross weight (Kgs)	20 Kgs
Device Color	Black & Red

FEATURES

- Pure sinewave solar inverter
- On-grid/Off-Grid.
- Output power Factor 1.0.
- Battery independent design.
- Built-in 120A MPPT Solar charger.
- Wide PV input voltage range (90-450VDC).
- Built-in anti-dust kit.
- Smart battery charger design.



SPECIFICATIONS

Model name	TRI-10KW	TRI-15KW
Phase Type	3 Phase in / 3 Phase Out	3 Phase in / 3 Phase Out
Maximum PV input Power	14850W	22500W
Rated Output Power	10000W	15000W
Maximum Charging Power	9600W	15000W
Nominal DC Voltage /Maximum DC Voltage	720VDC / 900VDC	720VDC / 900VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC	320VDC / 350VDC
MMPT Voltage Range	400VDC / 800VDC	400VDC / 800VDC
Number of MPPT Trackers / Maximum Input Current	2/2* 18.6A	2/A:37.65A, B:18.6A
Nominal Output Voltage	230VAC (P-N), 400VAC (P-P)	230VAC (P-N), 400VAC (P-P)
Output Voltage Range	184VAC to 265VAC per phase	184VAC to 265.5 VAC per phase
Nominal Output Current	14.5A per phase	21.7A per phase
Power Factor	<0.99	<0.99
European Efficiency	96%	95%
Maximum Conversion Efficiency	96%	95%
AC Startup Voltage / Auto Restart Voltage	120VAC to 140VAC P-P/ 180 VAC P-P	120VAC to 140VAC P-P/ 180 VAC P-P
Acceptable Input Voltage Range	170VAC to 280VAC per phase	170VAC to 280VAC per phase
Maximum AC input Current	40A	40A
Maximum DC Voltage	900VDC	900VDC
MPPT Voltage Range	400VDC to 800VDC	350VDC to 850VDC
Number of MPPT Trackers / Maximum Input Current	2/2 *18.6A	2/A:37.65A, B:18.6A
Nominal Output Voltage	230VAC (P-N), 400VAC (P-P)	230VAC (P-N), 400VAC (P-P)
Output Waveform	Pure Sinewave	Pure Sinewave
Efficiency (DC to AC)	91%	91%
Nominal DC Voltage /Maximum DC Voltage	720VDC / 900VDC	720VDC / 900VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC	320VDC / 350VDC
MMPT Voltage Range	400VDC / 800VDC	400VDC / 800VDC
Number of MPPT Trackers / Maximum Input Current	2/2* 18.6A	2/A:37.65A, B:18.6A
Nominal Output Voltage	230VAC (P-N), 400VAC (P-P)	230VAC (P-N), 400VAC (P-P)
Output Voltage Range	184VAC to 265VAC Per Phase	184VAC to 265.5VAC Per Phase
Nominal Output Current	14.5A Per Phase	21.7A Per Phase
AC Startup Voltage / Auto Restart Voltage	120-140VAC P-P/ 180 VAC P-P	120-140VAC P-P/ 180 VAC P-P
Acceptable Voltage Range	170 VAC to 280 VAC Per Phase	170 VAC to 280 VAC Per Phase
Maximum AC Input Current	40A	40A
Nominal Output Voltage	230VAC (P-N), 400VAC (P-P)	230VAC (P-N), 400VAC (P-P)
Efficiency (DC to AC)	91%	91%
Nominal Output Voltage	48VDC	48VDC
Maximum Charging Current	Default 60A, (10A to 200A adjustable)	Default 60A, (10A to 200A adjustable)
Communication Port	RS-232 / USB	RS-232 / USB, and dry contact
Intelligent Slot	Optional SNMP, Modbus and As400 Card	Optional SNMP, Modbus and As400 Card
Dimensions (D*W*L:mm) and Weight (KG)	167.2*500*622, 40KG	219*650*820, 62KG
Humidity	0 to 90% (non condensing)	0 to 90% (non condensing)
Operating Temperature	0 to 55	0 to 55
Altitude	0 to 1000 Meter	0 to 1000 Meter

Oku

FEATURES

- Backup long delay design, can be loaded under the battery mode for a long time.
- Two working mode: UPS mode and INV mode
- Wide AC input range
- Superior microprocessors ensure reliable operation
- Monitor the working status through the display automatically adjust the mains boost, buck and stabilize the voltage output
- Main restart function
- High current charging function
- Shutdown charging function
- Compatible generator



SPECIFICATIONS

SMART INVERTER OKU SERIES		
Model	Oku 500	Oku 1000
Capacity	500VA	100VA
Rated Power	300W	600W
INPUT		
Range of working voltage under UPS mode	125 - 280 VAC under 50% Load	
Range of working voltage under INV mode	100 - 280 VAC under 50% Load	
Frequency	42-80Hz	
OUTPUT		
Voltage range (Battery mode)	220VAC \pm 10%	
Frequency range (Battery mode)	47-53Hz	
Transfer Time	2.6 ms	
Waveform (Battery)	Modified sine wave	
CHARGING		
Number of batteries	12Vx1 pcs	
Charging voltage	13.75V \pm 1%	
Charging current	3.5~6A	8~12A
LED Instruction		
LED display	Load size, battery capacity, mains mode, battery mode, malfunction indication	
Audible alarm		
Battery mode	Audible alarm-6 seconds beeping	
Load Battery	Audible alarm-1 seconds beeping	
Overload	Audible alarm-0.5 seconds beeping	
Malfunction	Audible alarm-continuous beeping	
Protections	Overload, Deep discharge and overcharge protection	
Physical properties		
Dimension, D X W X H (mm)	245x122x195mm(250*258*135mm)	
Net weight (kgs)	5.2	7.6
Working environment		
Humidity and Temperature	Relative humidity 0-90% and temperature 0-40°C (non condensing)	
Acoustic Noise (db)	Less than 40dB @ 1metre	

START USING SOLAR ENERGY

Choose
**MPPT SOLAR
CHARGE CONTROLLER**
with different Capacities



- 40A
- 60A
- 80A
- 100A

- ▶ SOLAR STREET LIGHT
- ▶ SOLAR FLOODING LIGHT
- ▶ SOLAR GARDEN LIGHT

- ✔ Anti Rust Metal
- ✔ Long Lasting
- ✔ Zero Maintenance
- ✔ Sleek Design



Available in

- ✔ 300W
- ✔ 400W
- ✔ 500W



TIGER

The backup time when you change from electricity to generator is very important.
That's why we produced our Tiger products.

TIGER ONLINE UPS

FEATURES

- Available in different Capacities from 1kva till 30kva
- True Online.
- Protection against all types of power problems



SPECIFICATIONS

Online High Frequency UPS					
Model	TG1KVA	TG2KVA	TG3KVA	TG6KVA	TG10KVA
Phase	Single-phase				
Capacity	1000VA/800W	2000VA/1600W	3000VA/2400W	6000VA/5400W	10000VA/9000W
Input					
Voltage Range	110-300VAC in 50% load 160-300VAC in 100% load			110-300VAC in 50% load 176-300VAC in 100% load	
Input Return Voltage	110-300V				
Frequency Range	40Hz -70Hz				
Power Factor	100% load ? 0.95	100% load ? 0.97	100% load ? 0.97	100% load ? 0.99	
Output					
Output Voltage	220VAC± 1% £ 208/220/230/240 the panel is adjustable £ ©				
Voltage range (Batt. Mode)	±1%				
Frequency Range (Sync Calibration Range)	47Hz- 53Hz or 57Hz - 63Hz				
Frequency Range (Batt. Mode)	50 Hz (60Hz optional) ± 0.25 Hz				
Surge Ratio	3: 1				
Harmonic Distortion	?3% THD(linear load) ?6% THD (Nonlinear load)				
Transfer Time (AC to DC)	0ms				
Transfer Time (inverter to bypass)	4 ms(standard)				
Waveform	Pure sine wave				
Battery					
Standard Model Battery Type	12V/7AH		12V/7AH		
Standard Model Battery Quantity	3	6	8	16	20
Standard Model Charging Current	1.0A(Max)				
Standard Model Charging Voltage	41.0VDC ± 1%	82.1VDC ± 1%	110VDC ± 1%	220VDC ± 1%	275VDC ± 1%
Long Run Model Battery Type	Depends on the buyer				
Long Run Model Battery Quantity	3	6	8	16	16
Long Run Model Charging Current	6A	4A or 8A (standard is 4A)			1-10A selected
Long Run Model Charging Voltage	41.0VDC ± 1%	82.1VDC ± 1%	110VDC ± 1%	220VDC ± 1%	
Protection against					
Full time lightning protection, noise and surge protection; Output short circuit protection and overload protection					
Appearance					
LCD Display	Using LCD display, the status parameters at a glance; Load level, battery capacity, AC Mode, battery mode, bypass mode, fault indication				
Alarm					
Battery Mode	Alarm beeps every four seconds				
Low Battery	Alarm beeps every second				
Overload	Alarm beeps every second				
Fault	Alarm beeps continuously				
interface					
Smart RS232 interface(USB interface to communicate with engineer)					
Environment					
Temperature And Humidity	Humidity 20-90%, temperature 0-40°C (non-condensing)				
Noise(dB)	< 50dBA at one meter distance				
Control Management					
Smart RS-232	Support Windows® 2000/2003/XP/Vista/2008,Windows® 7/8, Linux, Unix				
Optional SNMP	Power Management supports SNMP management and network management				
External Dimension					
Standard Model Dimension(mm)	352*145*213	450*192*335		450*192*670	
Standard Model Weight(KGS)	N.W:10.9	N.W:23.7	N.W:27.7	N.W:26.7	N.W:31
Long Run Model Dimension(mm)	352*145*213	450*192*335		450*192*335	
Long Run Model Weight(KGS)	N.W:5.8	N.W:12.6	N.W:13	N.W:14.6	N.W:15
Warranty					
Warranty 15 months on Spare Parts and 6 Months on Batteries					
Certification					
ISO9001/ISO14001/CE Certification					



DC UPS

HIGH CAPACITY • COMPATIBILITY • INTELLIGENT

High capacity lithium battery, provides long back up to the loads.
 High compatibility, suitable for most digital products in the market.
 POE can transmit power and simplify wiring.
 Intelligent circuit design with over charging, over-discharging and short circuit protection.
 Built-in adapter allows wide AC voltage range (85-265V AC).



BACK PANEL

2 USB Socket

Switch Button

LAN Socket

POE Socket

DC UPS T100

Specifications

MODEL	DC UPS T100			
INPUT				
Input Voltage	100-240Vac/50Hz-60Hz			
OUTPUT				
Output Power (Max.)	18W			
Output	USB Interface	DC Interface		POE Interface
Output voltage (selecatable)	5V DC	9V DC	12V DC	15V DC / 24V DC
Output Polarity	Standard	- ⊕ +		+4,5pins - 7,8pins
Output Power & Current	2.0A / 10W	1.0A / 9W	1.0A / 12W	(0.8A/15V)0.5A/12W or 24V
QTY, & Capacity of Battery	2200mAh * 4 Lithium battery			
CHARGE				
Charging Period	Typical: 2-3 Hrs			
OPERATION				
Working Period	Typical: 5-6 Hrs			
PHYSICAL				
Unit Dimension (mm)	160*105*28	Net Weight (Kg)		0.4
ENVIRONMENT				
Environment of Performance	Temperature 0°C-40°C, Humidity 20%-90%			
Noise Level	Less than 40dB			

*Product specification are subject to change without notice



TIGER

HIGH QUALITY OF INVERTER & UPS BATTERIES



AVAILABLE IN

- ✓ 12V/200AH (Flat and Slim)
- ✓ 12V/150AH
- ✓ 12V/100AH
- ✓ 12V/ 50 AH
- ✓ 12V/9AH
- ✓ 12V/7.5AH
- ✓ 2V/600AH
- ✓ 2V/ 1000AH
- ✓ 2V/ 2000AH



Onyx Line

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WORLD PRESENCE

