

THE FUTURE IS HERE

SOLAR SOLUTIONS

ONLINE UPS

BATTERY CHARGERS

LIFT COMPONENTS

SOLAR INVERTER CATALOG

KAYAM SOLAR

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KAYAM SOLAR





Company Focus

To acquire market of UPS, Solar Inverters and Chargers by providing a low cost, more reliable, better looking and unique featured product. A lot of efforts have been put on the appearance of the product. Once a reasonable market is acquired and a brand value is created, the company shall move to the next level where new products and services will be added.

Why KAYAM ??

R&D

We have our own software and hardware, development team. Our products are always High-End Devices. Either it is Solar or Battery Chargers, Electrower always delivers the best in the industry.

easy

The focus has consistently remained on the highest quality standards as well as consumer and customer satisfaction. We believe and we deliver quality.

100% Premium Quality GUARANTEED

Our products are easy for installation and usage. With the help of an LCD display, fault finding is also very simple. 24x7 support makes it easier.

24 7

Our Experts are always available for the Service or Installation support or queries, either Telephonic or Visiting the site. We don't pull off our support at any point in time, its on-site and on-time.

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SOLAR
HOME PCU
INDUSTRIAL PCU
CHARGE CONTROLLERS



ELEVATOR
COMPONENTS
RESCUE DEVICES
CONTROL PANELS



OUR STRENGTHS

CHARGER
E- RICKSHAW
E-VEHICLE



UPS
PFC ONLINE
LI-ON BATTERY UPS



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KAYAM SOLAR

MPPT SERIES PCU



CORE FEATURES



CONFIGURABLE USER SETTINGS



PURE SINE WAVE



TRUE MPPT



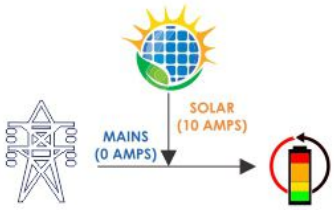
REMOTE MONITORING IoT



ADVANCED DSP TECHNOLOGY



INTELLIGENT MODES



AI CHARGE SHARING

- Big Data Big Display
- Built-in Energy Meter
- Maximized Solar Usage through Intelligent modes.
- 40% less panel required than other PCUs
- RS-232 (Industrial Standard MODBUS)
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections

- IGBT based design and Fast Charging
- Wide range MPPT Input
- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Works as standalone Solar Inverter in case of No-Grid

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SOLAR MPPT PCU (2019-2020)									
Technical Specifications									
Parameters	**Units**	**Rating**							
Model		**1KVA**	**1KVA**	**2KVA**	**3KVA/5KVA**	**5KVA/7.5KVA**	**7.5KVA/10KVA**	**10KVA**	**15KVA**
Operating DC Voltage	**Volts**	**12**	**24**	**24**	**48**	**96**	**120**	**180**	**240**
SPV Parameters									
SPV Open Circuit Voltage Range (Min-Max)	**Volts**	**18-45**	**36-90**	**36-90**	**72-180**	**144-360**	**180-450**	**270-450**	**360-600**
Max SPV Power	**KW**	**1**	**1**	**2**	**3/5**	**5/7.5**	**7.5/10**	**10**	**15**
Compatible SPV Panels		**36 / 60 / 72 Cell**							
MPPT Based Charge Controller									
Switching Element		**IGBT Module**							
Controller		**DSP**							
Efficiency		**> 95%**							
Battery Charging Stages		**5 (Softstart, Boost, Absorbtion, Float, Equalise)**							
Battery									
Low Cut Off	**Volts**	**10.5 / Battery +/-2%**							
Low Cut Off Recovery	**Volts**	**11.5 / Battery +/-2%**							
Low Buzzer	**Volts**	**10.7 / Battery +/-2%**							
High Cut Off	**Volts**	**15.5 / Battery +/-2%**							
High Cut Off Recovery	**Volts**	**15.0 / Battery +/-2%**							
Boost Charging Volt by SPV(TUB)	**Volts**	**14.5 / Battery +/-2%**							
Boost Charging Volt by Grid(TUB)	**Volts**	**14.0 / Battery +/-2%**							
Charging Current by Grid	**Amps**	**10A +/-2%**							
No Load Battery Current	**%**	**0.02**							
Output									
Output@ No load	**Volts**	**230 +/-2%**							
Output Frequency	**Hz**	**50 +/-2%**							
Overload	**Amps**	**3.5**	**3.5**	**7**	**10.5/17.4**	**17.4 / 26.0**	**26.0 / 34.8**	**34.8**	**52.2**
	Watts	**800W**	**800W**	**1.6KW**	**2.4KW / 4KW**	**4KW / 6KW**	**6KW / 8KW**	**8KW**	**12KW**
Output Low Retry	**-**	**1 Time**							
Output Short Circuit	**-**	**1 Time**							
Grid									
No of Phase	**-**	**1Phase-3Wire P,N,E**							
Voltage Range(Inverter Mode)	**V**	**100-280 +/-2%**							
Voltage Range(UPS Mode)	**V**	**175-255 +/-2%**							
Frequency Range	**Hz**	**45 - 55 +/-2%**							
Display									
Display	**Alphanumeric**	**16X2 LCD**		**20X4 LCD**					
Parameters	**Output (Inverter)**	**Voltage, Current, Power and Frequency**							
	Input (Grid)	**Voltage and Frequency**							
	Solar	**Voltage, Current, Power and Energy (Optional)**							
	Battery	**Voltage, Current**							
	Status/Faults	**Inverter Status, Mains Status, Charger Status, Solar Status and Battery Status/Charging Stages**							
Inverter									
Switching Element	**-**	**MOSFET**				**IGBT Module**			
Output voltage	**Volts**	**230 +/-2%**							
Phase	**-**	**1Phase-3Wire P,N,E**							
Output Waveform	**-**	**Digitally Filtered Pure Sine Wave**							
Frequency	**Hz**	**50 +/- 2%**							
Changeover (Mains to Inverter)	**ms**	**<10ms**							
Output Power Factor	**Pf**	**0.8**							
Overload Retry	**-**	**3 Times**							
Switches	**-**	**System ON/OFF, Mode Selection: Hybrid / PCU / Smart, INV /UPS Selection**							
Indication (LED)	**-**	**Inverter On, Mains In Range, Battery Low/High, Charger On, Overload, Faults**							
Alarm (Audible)	**-**	**Battery Low, Overload, Charger On, Inverter On, Solar Charger On**							
Protection	**-**	**Overload, Short Circuit Protection, Over Voltage, SPV Surge and Transient protection (MOV Varistors), Reverse Polarity of Battery, Over temperature Protection, Under Voltage and Over Voltage Protection**							
Cooling	**-**	**Forced Air cooling(Temp Controlled)**							
Communication	**-**	**Remote Monitoring System (Over GPRS / BLE and Wifi) or RS232**							
Operating Temp	**C**	**0-50**							
Operating Humidity	**%**	**95**							
Protection class	**-**	**IP20**							
Dimension(LXWXH)	**mm**	**355x330x205**		**510x460x305**		**750x500x350**		**750x500x350**	
Weight	**kg**	**18**	**21**	**31.5**	**40**	**52**	**63**	**71**	**85**

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PWM SERIES PCU







CORE FEATURES



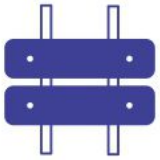
LCD DISPLAY



PURE SINE WAVE



TRUE CV CC PWM



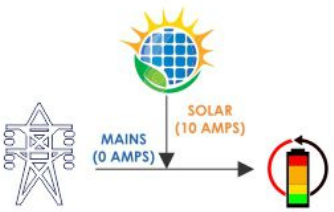
WALLMOUNT DESIGN



ADVANCED DSP TECHNOLOGY



INTELLIGENT MODES



AI CHARGE SHARING

- Big Display for Data
- Maximized Solar Usage through Intelligent modes.
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections

- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Works as standalone Solar Inverter in case of No-Grid

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SOLAR PWM PCU(2019-2020)									
Technical Specifications									
Parameters	**Units**	**Rating**							
Model		**1150/850VA**	**1550/1KVA**	**2150/1.5KVA**	**2550/2KVA**	**3150/2.5KVA**	**3550/3KVA**	**4550/4KVA**	**5550/5KVA**
Operating DC Voltage	**Volts**	**12**	**12**	**24**	**24**	**24**	**48**	**48**	**48**
SPV Parameters									
SPV Open Circuit Voltage Range (Min-Max)	**VOC**	**16-30**	**16-30**	**32-60**	**32-60**	**32-60**	**64-120**	**64-120**	**64-120**
Max SPV Power	**W**	**650**	**800**	**1200**	**1600**	**1600**	**2400**	**3200**	**3200**
Max Batt Current	**Amps**	**50**	**60**	**50**	**60**	**60**	**50**	**60**	**60**
Recommended Panel Cell	**Cell**	**36**	**36**	**60/72**	**60/72**	**60/72**	**60/72**	**60/72**	**60/72**
PWM Based Charge Controller									
Switching Element		**MOSFET**							
Controller		**DSP**							
Efficiency		**95%**							
Battery Charging Stages		**5 (Softstart, Boost, Absorbtion, Float, Equalise)**							
Battery									
Low Cut Off	**Volts**	**10.5/Batt +/-2%**							
Low Cut Off Recovery	**Volts**	**11.5/Batt +/-2%**							
Low Buzzer	**Volts**	**10.7/Batt +/-2%**							
High Cut Off	**Volts**	**15.5/Batt +/-2%**							
High Cut Off Recovery	**Volts**	**15.0/Batt +/-2%**							
Boost Charging Volt by SPV(TUB)	**Volts**	**14.5/Batt +/-2%**							
Boost Charging Volt by Grid(TUB)	**Volts**	**14.0/Batt +/-2%**							
Charging Current by Grid	**Amps**	**10A +/-2%**							
Output									
Output@ No load	**V**	**220 +/-2%**							
Output Frequency	**Hz**	**50 +/- 2%**							
Overload	**Watts**	**680W**	**800W**	**1.2KW**	**1.6KW**	**2KW**	**2.4KW**	**3.2KW**	**4KW**
	AC Amps	**3.1**	**3.6**	**5.5**	**7.3**	**9.1**	**10.9**	**13.9**	**18.1**
	Disharging Amps	**55**	**67**	**55**	**67**	**83**	**55**	**67**	**83**
Output Low Retry	**-**	**1 time**							
Output Short Circuit	**-**	**1 time**							
Display									
Display	**Alphanumeric**	**16X2 LCD**						**20X4 LCD**	
Parameters	**Inverter**	**Voltage, Current (Load%) and Frequency**							
	Input (Grid)	**Voltage and Frequency**							
	Solar	**Voltage, Current**						**Power and Energy (Optional)**	
	Battery	**Voltage, Current**							
	Status/Faults	**Inverter Status, Mains Status, Charger Status, Solar Status and Battery Status/Charging Stages**							
Grid									
No of Phase	**-**	**1Phase-3Wire P,N,E**							
Voltage Range(Inverter)	**V**	**100-280 +/-2%**							
Voltage Range(UPS)	**V**	**175-255 +/-2%**							
Frequency Range	**Hz**	**45-55 +/-2%**							
Inverter									
Switching Element	**-**	**MOSFET**							
Output voltage	**V**	**220 +/-2%**							
Phase	**-**	**1Phase-3Wire P,N,E**							
Output Waveform	**-**	**Digitally Filtered Pure Sine Wave**							
Frequency	**Hz**	**50**							
Changeover (Mains to Inverter)	**ms**	**<10ms**							
Output Power Factor	**Pf**	**0.8**							
Overload Retry	**-**	**3 Times**							
Switches	**-**	**System ON/OFF, Mode Selection: Hybrid / Smart, INV /UPS Selection**							
Indication	**-**	**Inverter On, Mains In Range, Battery Low/High, Charger On, Overload, Faults**							
Alarm	**-**	**Battery Low, Overload, Charger On, Inverter On, Solar Charger On**							
Protection	**-**	**Overload,Short Circuit Protection,Over Voltage,SPV Surge and Transient protection (MOV Varistors), Reverse Polarity of Battery,Over temperature Protection,under voltage and over voltage Protection**							
Cooling	**-**	**Forced Air cooling(Temp Controlled)**							
Operating Temp	**C**	**0-50**							
Operating Humidity	**%**	**95**							
Protection Class	**-**	**IP20**							

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MPPT

MAXIMO SERIES

CHARGE CONTROLLERS



- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Wide Range MPPT Input

- Big Display for Data
- IGBT Based Design
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections

MPPT CHARGE CONTROLLER (2019-2020)							
Technical Specifications							
General							
Model	MPPT						
Battery type	TUBULAR / SMF (Factory Setting - Optional)						
Battery Charging Techniques	5 Stages (Soft Start, Boost, Absorption, Float and Equalize)						
Electrical							
Nomainal System Voltage	48V	96V	120V	180V	240V	360V	480V
No of Batteries	4	8	10	15	20	30	40
SPV Module	5KW	7.5KW	10KW	15KW	20KW	30KW	40KW
Charging Current (Max)	60A						
Charge Controller Efficiency	>95%						
Idle Consumption	<100mA						
SPV Open Circuit Voltage Range (Min-Max)	60-180V	120-360V	150-450V	225-450V	360-600V	450-600V	550-900V
SPV Current (Max)	40A						
Efficiency	>95%						
Battery Setpoint @ 25"c							
Absorption Duration	3Hr						
Float voltage tubular battery	14V / Battery +/-2%						
Bulk voltage Tubular battery	14.5V / Battery +/-2%						
Equalize Voltage	15V / Battery +/-2%						
Equalize Duration	3Hr						
Equalize Calendar	28 Days						
Protection	Battery Reverse Polarity, Battery Reverse Current, Solar High/Low voltage, SPV Reverse polarity, Over Temperature/Over current						
Display Parameter	Battery Voltage, Battery Current, Solar Voltage, Solar Current, Solar Status, Battery Bar Graph, System Overload, Overheat						
Physical							
Ingress Protection	IP20						
Communication	RMS(Remote Monitoring System - Optional)						

KAYAM SOLAR

PWM
SOLO SERIES
CHARGE CONTROLLERS



- 7 Segment Display for Data
- Incorporated with Microchip
- Safety and Protections
- Sleek & Aesthetic design
- Available 12V/24V

SOLO SERIES - PWM CHARGER(2019-2020)				
Technical Specifications				
Input	DC Voltage	12V	24V	24V/36/48V AUTO
	Battery Type	Tubular(By Default) / SMF(Optional-Factory Set)		
	DISPLAY TYPE	7 Segment	7 Segment	LCD
	Charging Current Capacity (Max)	30A/40A/50A		
	Battery Charging Stages	5 Stages (Soft Start, Boost, Absorption, Float and Equalize)		
Photovoltaic	Charging Topology	PWM		
	Voc Max	25V	50V	100V
	VOC operating(Recommended)	22V(36 CELL)	36V(60 CELL)	90V(72 CELL+2)
	Voc Min	15V	30V	60V
	Efficiency	> 95%		
	PV Module	12V : Upto 500W		
		24V : Upto 1000W		
		24V : Upto 1000W		
		48V : Upto 1500W		
Battery Setpoint @ 25'c	Boost Voltage Tubular Battery	14.5V	29V	58V
	Absorption Duration	3 Hour		
	Float Voltage Tubular Battery	13.5V	27V	54V
	Equalize Voltage	15V	30V	60V
	Equalize Duration	3 Hour		
	Equalize Calendar	28 Days		
Display	Parameters	Battery Voltage,Battery Current		Solar Voltage, Solar Current
Protections	Battery Reverse Polarity, Battery Reverse Current, Over Current for SPV, Solar High Voltage, Solar Reverse Polarity, Solar Low Voltage			
Physical	Ingress Protection	IP20		
	Fixing	Wall Mounted		

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GENIO

SOLAR MANAGEMENT UNIT



FAST CHARGING

AUTO 12V 24V

AUTOMATIC 12V/24V



LCD DISPLAY

SMART HYBRID

INTELLIGENT MODES

- Wallmount Design
- Maximized Solar Usage through Intelligent modes
- CV and CC based Solar PWM Charger

- 6 Stage Battery Charging
- Incorporated with ST DSP Engines
- Safety and Protections
- Savings and Power Display

GENIO - SMU (2019-2020)				
Technical Specifications				
Input	DC Voltage	12V/24V (Switch based Selection)		48V(under development)
	Battery Type	Tubular / SMF (Factory Set)		
	Charging Amp Capacity	50A		
	Battery Charging Stages	5 Stages (Soft Start, Boost, Absorption, Float and Equalize)		
Photovoltaic	Charging Topology	PWM		
	Voc Max	25V/50V		
	Voc Operating(Recommended)	22V(36 CELL)	36V(60 CELL)+36V(60 CELL)	45V(60 CELL)+45V(60 CELL)
	Voc Min	15V/30V +/-2%		
	Maximum Solar Current	50A +/-2%		
	Efficiency	>95%		
	PV Module	12V : Upto 600W 24V : Upto 1200W		
Battery Setpoint @ 25'c	Boost Voltage Tubular Battery	14.5V/29.0V +/-2%		
	Absorption Duration	3 Hour		
	Float Voltage Tubular Battery	13.5V/27V +/-2%		
	Equalize Voltage	15V/30V +/-2%		
	Equalize Duration	3 Hour		
	Equalize Calendar	28 Days		
	Mains Disconnect When Sufficient Solar Power for Tubular	14.5V/29.0V +/-2%		
	Mains Reconnect when Insufficient Solar Power	12V/24V +/-2%		
Display	LCD Display 16x2(GREEN)	Battery Voltage,Battery Current, Battery Type, Solar Voltage, Solar Current, Mode Selection, SPV High / Low, Charger Status, Savings in KWH and Indian Rupees, Max PV Current		
Protections	Battery Reverse Polarity, Battery Reverse Current, Over Current for SPV, Solar High Voltage, Solar Reverse Polarity, Load Short Circuit through AC fuse, Solar Low Voltage, Over Temperature			
Physical	Ingress Protection	IP20		
	Fixing	Wall Mounted		

KAYAM SOLAR

E-RICKSHAW CHARGER



FAST 15A/30A CHARGING

REVERSE BATTERY PROTECTION

MICROCONTROLLER SMPS CHARGER

INCREASED MILEAGE

- Longer Battery backups
- Surge Protection
- 80AH - 140AH Battery Supported
- 70% more Battery Life by Optimized Charging
- High-frequency PWM circuit
- Protection Against Input surge & Inrush current

- Compact, Lightweight, Portable & Shockproof
- Excellent Transient Response
- Spark Free Anderson connector
- Standard EMI/EMC Compliance
- Over Temperature Shut Down
- Force Air Cooling

E-RICKSHAW CHARGER SERIES (2019-2020)		
Technical Specifications		
Model	**48V/15A**	**48V/30A**
AC Input		
Input Voltage Range	**160-280 VAC (230V Nominal)**	
Input Freq Range	**50Hz +/- 4%**	
Input Current (Max)	**7.0A**	**14.0A**
Connection Type	**1.5 Meter Length with 3 Core, 3Pin 16A AC Plug**	
Charger		
Topology	**Half Bridge**	
Switching Freq	**50Khz**	
DC Output		
DC Output Voltage	**62.5V+/- 2%**	
DC Output Current	**15A**	**30A**
Peak Efficiency	**90.00%**	
Regulation	**< 2%**	
Connection Type	**Anderson Connector (1.5m Length)**	
Protections	**Over current, Short Circuit, Over Voltage, Over Temperature, Battery Reverse, Input (Ph-Ph)**	
Cooling	**Fan Cooled (Temperature Controlled)**	
Indications	**Charging Level (25%, 50%, 75%, 100%), Charger On (Mains in Range), Battery Type, Charging Stage**	
Battery Types	**Lead Acid, Tubular Batteries, Li-On (80-140AH)**	
Environmental		
Operating Temperature	**0* to 50*C**	
Storage Temperature	**-10*C to 60*C**	
Humidity	**40*C, 95% RH**	
Vibration Test	**Pass**	
Physical		
Dimesion (LxWxH) mm	**300X100X200**	
Weight	**4**	
Enclosure	**Metallic**	

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ARD

AUTOMATIC
RESCUE DEVICE



SUPPORTED ON
ALL LIFT PANELS





CORE FEATURES



DUAL / SINGLE
PHASE OUTPUT



PURE SINE WAVE



RUGGED
RELIABLE



INBUILT BATTERY
SUPPORTED



7 STAGE CHARGING
FOR BATTERY HEALTH

- Selectable ARD Shutdown Timer (Auto – Manual) Lift
- Improved Charger for Low AH Batteries
- Compact size, also available in Wallmounting cabinet
- Complete installation support by industry experts

- Pure Sinewave output
- Long Run Battery
- 12 rescues on a single charge
- Dual-Phase Output
- 7 Stage optimized Charging
- Easy Installation

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ARD / iLIFT - Automatic Rescue Device (2019-2020)									
Technical Specifications		**LIFT UPS**				**ARD**			
Parameters	**Units**	**Rating**				**Rating**			
Model	**iLIFT**	**5HP**	**7.5HP**	**10HP**	**15HP**	**5HP**	**7.5HP**	**10HP**	**15HP**
Operating DC Voltage	**Volts**	**48V**	**48V**	**72V**	**72V**	**48V**	**48V**	**48V**	**96V**
No of Batteries	**Nos**	**4**	**4**	**6**	**6**	**4**	**4**	**4**	**8**
MICROCONTROLLER PFC BASED CHARGER									
Switching Element		**MOSFET**							
Control Type		**DSP**							
Type of Charger		**PFC**							
Efficiency		**95%**							
Battery Charging Stages		**5 (Health Maintain Check for 7AH)**							
Power Factor		**0.8**							
Battery									
Low Cut Off	**Volts**	**10/Batt +/- 2%**							
Low Cut Off Recovery	**Volts**	**12/Batt +/-2%**							
Low Buzzer	**Volts**	**10.2/Batt +/- 2%**							
High Cut Off	**Volts**	**15.5/Batt +/- 2%**							
High Cut Off Recovery	**Volts**	**15.0/Batt +/- 2%**							
Charging current by Grid	**Amps**	**1 +/- 2%**							
Output									
Output @ No load	**Volts**	**220 +/2%**				**440 +/2%**			
Output Frequency	**Hz**	**50 +/2%**				**50 +/2%**			
Output @ Full Batt to Low Batt	**Volts**	**220 +/-10%**				**440 +/-10%**			
Output Low Cut	**Volts**	**150**				**300**			
Output High Cut	**Volts**	**260**				**520**			
Output Low Retry	**-**	**1 Time**				**1 Time**			
Output Short Circuit	**-**	**1 Time**				**1 Time**			
UPS/ARD Backup Time	**Min**	**2 MINUTES**				**3 MINUTES**			
No Load Battery Current	**%**	**2%**				**2%**			
Overload	**Amps**	**3.6 / KVA**				**3.6 / KVA**			
Mains									
No of Phase	**-**	**1Phase-2Wire P,N**				**3Phase-4Wire R,Y,B,N**			
Voltage range	**Volts**	**120-280 +/2%**				**120-280 +/2%**			
Mains low recovery range	**Volts**	**10**				**10**			
Mains high recovery range	**Volts**	**5**				**5**			
Frequency range	**Hz**	**50 +/-3**				**50 +/-3**			
Battery Charging Stages	**-**	**5**				**5**			
Inverter									
Switching Element	**-**	**MOSFET**				**MOSFET**			
Control	**-**	**PWM**				**PWM**			
Output voltage	**Volts**	**220 +/2%**				**220 +/2%**			
Phase	**-**	**1Phase-2Wire P,N**				**2Phase-2Wire R,Y**			
Output Waveform	**-**	**Sine Wave**				**Sine Wave**			
Frequency	**Hz**	**50**				**50**			
Changeover UPS/ARD to Mains	**-**	**<10ms**				**<10ms**			
Changeover Mains to UPS/ARD	**-**	**<10ms**				**=12s**			
Output Power factor	**Pf**	**0.8**				**0.8**			
Switch	**-**	**UPS ON/OFF**				**ARD ON/OFF**			
Indication	**-**	**Inverter On, Battery Low / High, Overload, Mains Charging On, Mains On**				**Inverter On, Battery Low / High, Overload, Mains Charging On, Mains On**			
Alarm	**-**	**Batt Low, Overload, Charger On, Inverter On**				**Batt Low, Overload, Charger On, Inverter On**			
Protection	**-**	**Overload,Short Circuit Protection,Over Voltage,Mains Surge and Transient protection (MOV Varistors), Reverse Polarity of Battery,Over temperature Protection, Under voltage and over voltage Protection**							
Operating Temp	**C**	**0-50**				**0-50**			
Operating Humidity	**%**	**< 95**				**< 95**			
Protection class	**-**	**IP20**				**IP20**			
Weight	**KG**	**20**	**30**	**40**	**50**	**20**	**30**	**40**	**50**

KAYAM SOLAR

KAYAM

CONTINUO & Economy CONTINUO+

PFC ONLINE UPS





CORE FEATURES

GALVANIC ISOLATION

HIGH & LOW CHARGING

PFC CHARGER

INDUSTRIAL MODBUS MEGATECH COMM

ADVANCED DSP TECHNOLOGY



20X4 LCD DISPLAY



IGBT DESIGN

- Big Display for Data
- Built-in Energy Meter
- RS-232 (Industrial Standard MODBUS or Megatec)
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections
- 30% More Power Saving (Power Factor Correction)

- IGBT based design and Fast Charging
- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- High & Low Charging Option
- Better Output Regulation
- Cold Start Through Mains Supported

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CONTINUO - ONLINE UPS (2019-2020)						
Technical Specifications						
Parameters	**Units**	**Rating**				
Model	**CONTINUO**	**3KVA**	**5KVA**	**7.5KVA**	**10KVA**	**15KVA**
Operating DC Voltage	**Volts**	**72/96/120/144**	**120/144/168/180**	**168/180**	**168/180**	**180**
PFC Parameters						
Mains Input Range (Min - Max)	**Volts**	**165-265 +/- 2%**				
PFC Based Mains Charger						
Switching Element		**IGBT MODULE**				
Controller Type		**DSP**				
Type of Charger		**PFC**				
Efficiency		**95%**				
Battery Charging Stages		**5 Stages (Soft Start, Boost, Absorption, Float and Equalize)**				
Power Factor		**0.8 pf**				
Battery						
Low Cut Off	**Volts**	**10.5 / Battery +/-2%**				
Low Cut Off Recovery	**Volts**	**11.5 / Battery +/-2%**				
Low Buzzer	**Volts**	**10.7 / Battery +/-2%**				
High Cut Off	**Volts**	**15.5 / Battery +/-2%**				
High Cut Off Recovery	**Volts**	**15.0 / Battery +/-2%**				
Boost Charging Volt by Grid(TUB)	**Volts**	**14.0 / Battery +/-2%**				
Boost Charging Volt by Grid(SMF)	**Volts**	**13.75 / Battery +/-2%**				
Charging Current by Grid	**Amps**	**[2.5 (Normal) / 5 (High) +/- 2% (Default)] or [5 (Normal) / 10 (High) +/- 2% (Optional)]**				
Output						
Output @ No load	**Volts**	**230 +/- 2%**				
Output Frequency	**Hz**	**50 +/- 2%**				
Overload	**Amps**	**10.5**	**17.4**	**26.1**	**34.8**	**52.2**
	Watts	**2.4KW**	**4KW**	**6KW**	**8KW**	**12KW**
Output Low Retry	**-**	**1 time**				
Output Short Circuit	**-**	**1 time**				
No Load Battery Current	**%**	**2%**				
Display						
Display	**Alphanumeric**	**20X4 LCD**				
Parameters	**Output (Inverter)**	**Voltage, Current, Power and Frequency**				
	Input (Grid)	**Voltage and Frequency**				
	Battery	**Voltage, Current**				
	Status/Faults	**Inverter Status, Mains Status, Charger Status and Battery Status/Charging Stages**				
Mains						
No of Phase	**-**	**1Phase-3Wire P,N,E**				
Voltage range	**Volts**	**165-280 +/- 2%**				
Frequency range	**Hz**	**45-55 +/- 2%**				
Battery Charging Stages	**-**	**5**				
Inverter						
Switching Element	**-**	**MOSFET**				
Output voltage	**Volts**	**230**				
Phase	**-**	**1Phase-3Wire P,N,E**				
Output Waveform	**-**	**Digitally Filtered Pure Sine Wave**				
Frequency	**Hz**	**50**				
Output Power Factor	**Pf**	**0.8**				
Mains Bypass in case of Fault		**Static By Pass (Optional)**				
Overload Retry	**-**	**3**				
Switch	**-**	**System ON/OFF, HIGH/LOW Charging Selection,SMF/TUB Battery Selection**				
Indication	**-**	**UPS On, Mains In Range, Battery Low/High, Charger On, Overload, Faults**				
Alarm	**-**	**Battery Low, Overload, Charger On, UPS ON**				
Protection	**-**	**Overload,Short Circuit Protection,Over Voltage,Mains Surge and Transient protection (MOV Varistors),Reverse Polarity of Battery,Over temperature Protection,under voltage and over voltage Protection**				
Cooling	**-**	**Forced Air cooling(Temp Controlled)**				
Communication	**-**	**Remote Monitoring System (Over GPRS / BLE and Wifi) or RS232 (Megatec)**				
Operating Temp	**C**	**0-50**				
Operating Humidity	**%**	**95**				
Protection Class	**-**	**IP20**				
Dimension(LXWXH)	**mm**	**510x460x305**	**750x500x350**	**750x500x350**	**750x500x350**	**750x500x350**
Weight	**KG**	**20**	**30**	**40**	**50**	**70**

KAYAM SOLAR

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3 PHASE SOLAR ONLINE PCU/UPS



CORE FEATURES



CONFIGURABLE USER SETTINGS



3 PHASE STAR/ DELTA



TRUE MPPT



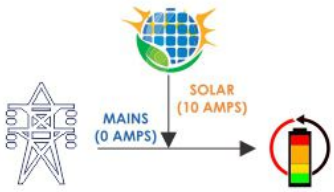
REMOTE MONITORING IoT



ADVANCED DSP TECHNOLOGY



GALVANIC ISOLATION



AI CHARGE SHARING

- Big Data Big Display
- Built-in Energy Meter
- Maximized Solar Usage through Intelligent modes.
- 40% less panel required than other PCUs
- RS-232 (Industrial Standard MODBUS)
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections

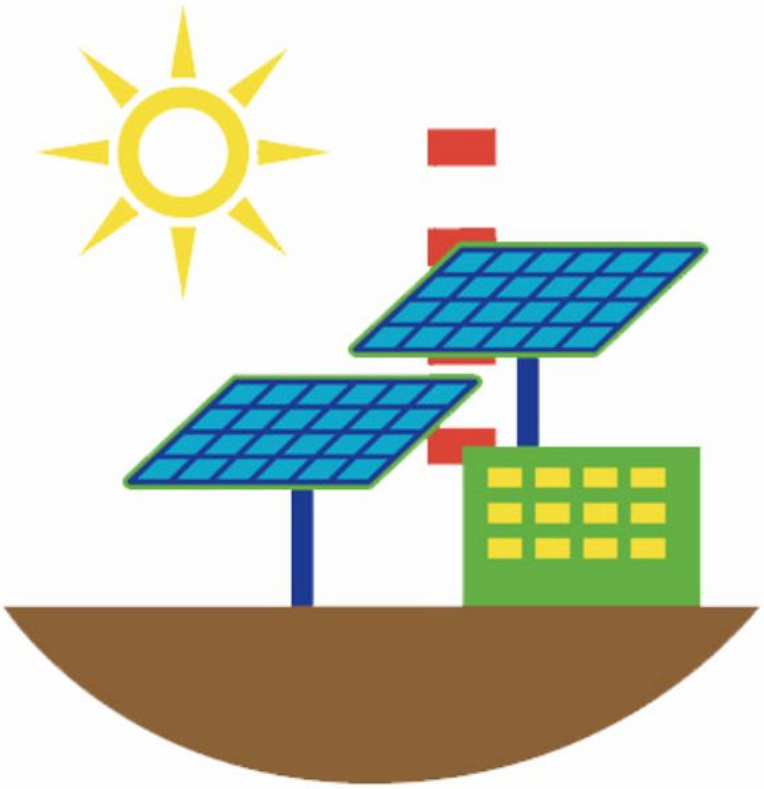
- IGBT based design and Fast Charging
- Wide range MPPT Input
- 6 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Works as standalone Solar Inverter in case of No-Grid

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3-PHASE ONLINE PCU WITH MPPT CHARGE CONTROLLER (2019-2020)

Technical Specifications														
Parameters	Units	Rating												
Model	Viraj 3 Phase	5KVA	7.5KVA	10KVA	15KVA	20KVA	30KVA	40KVA	50KVA	60KVA	80KVA	100KVA	120KVA	150KVA
Operating DC Voltage	Volts	240V/360V	240V/360V	240V/360V	240V/360V	240V/360V	360V/384V	360V/384V	360V/384V	360V/384V	360V/384V	360V/384V	360V/384V	360V/384V
SPV Parameters														
Max SPV Power	KW	5KW	7.5KW	10KW	15KW	20KW	30KW	40KW	50KW	60KW	80KW	100KW	120KW	150KW
Compatible SPV Panels		36 / 60 / 72 Cell												
MPPT Based Charge Controller														
Switching Element		IGBT Module												
Controller		DSP												
Efficiency		> 95%												
Max Current From Solar		60 Amps												
Battery Charging Stages		5 (Softstart, Boost, Absorbtion, Float, Equalise)												
Battery														
Low Cut Off	Volts	10.5 / Battery +/-2%												
Low Cut Off Recovery	Volts	11.5 / Battery +/-2%												
Low Buzzer	Volts	10.7 / Battery +/-2%												
High Cut Off	Volts	15.5 / Battery +/-2%												
High Cut Off Recovery	Volts	15.0 / Battery +/-2%												
Boost Charging Volt by SPV	Volts	14.5 / Battery +/-2%												
Boost Charging Volt by Grid	Volts	14.0 / Battery +/-2%												
Charging Current by Grid	Amps	10A +/-2%												
No Load Battery Current	%	0.02												
Output														
Output@ No load	Volts	415 V AC +/- 2%												
Output Frequency	Hz	50 +/-2%												
Overload Capacity	-	100% - 120% : 60 Seconds with 3 Times Auto Reset, 120%-150% : 5 Second,>150%:1 Second												
Output Low Retry	-	1 Time												
Output Short Circuit	-	1 Time												
Grid														
No of Phase	-	380V-480V 3 PHASE 4 WIRE(R,Y,B,N)												
Frequency Range	Hz	45-55 Hz+/-10%												
Power Factor	-	0.95												
Charger Topology	-	Buck/ Buck-Boost												
Display														
Display	Alphanumeric	20X4 LCD												
Parameters	Output	Voltage (R,Y.B) , Current (R,Y.B), Power (R,Y.B) and Frequency (R,Y.B)												
	Input (Grid)	Voltage(R,Y.B) and Frequency(R,Y.B)												
	Solar	Voltage, Current, Power and Energy (Optional)												
	Battery	Voltage, Current, Level (Bar Graph)												
	Status/Faults	Inverter Status, Mains Status, Charger Status, Solar Status and Battery Status/Charging Stages												
Inverter														
Switching Element	-	IGBT Module												
Output Waveform	-	Digitally Filtered Pure Sine Wave												
Changeover(Mains to Inverter)	ms	0 ms												
Output Power Factor	pf	0.8												
Overload Retry	-	3 Times												
Indication (LED)	-	Inverter On, Mains In Range, Battery Low/High, Charger On, Overload, Faults												
Alarm (Audible)	-	Battery Low, Overload, Charger On, Inverter On, Solar Charger On												
Protection	-	Overload, Short Circuit Protection, Over Voltage, SPV Surge and Transient protection (MOV Varistors), Reverse Polarity of Battery, Over temperature Protection, Under Voltage and Over Voltage Protection												
Cooling	-	Forced Air cooling(Temp Controlled)												
Communication	-	Remote Monitoring System (Over GPRS / BLE and Wifi) or RS232												
Operating Temp	C	0-50												
Operating Humidity	%	95												
Protection class	-	IP20												

KAYAM SOLAR



Mono-Crystalline
Poly-Crystalline
Solar Panels

Construction Features	
Type of Cell	PID Free Multi/Mono-Crystalline SI Cells
Glass	Tempered & Low Iron
Encapsulate	PID Resistance Ethylene Vinyl Acetate
Frame	>20 Micron Anodized Aluminum
Junction Box	Weather Proof Nylon IP 67

Temperature Coefficient	
Voltage	- 0.35% / *C
Current	0.10% / *C
Power	-0.47% / *C
NOCT	47 +/- 2 *C

Polycrystalline Cell Type

Polycrystalline cells are effectively a slice cut from a block of silicon, consisting of a large number of crystals. They have a speckled reflective appearance and you can see the thickness of the slice. These cells are less expensive to produce and more suited for Indian conditions.

Monocrystalline Cell Type

Monocrustalline cells are cut from a single crystal of silicon. In appearance, they will have a smooth texture and you will be able to see the thickness of the slice. These are slightly expensive to produce.

Kayam Solar Monocrystalline and Polycrystalline PV Modules with performance warranty of up to 25 years. They are certified for compliance to IEC standard.

Range available with us are from 165watts to 325watts catering to wide range of applications from rural to urban projects.

SOLAR PV PANELS				
Technical Specifications		165 Watts	265 Watts	325 Watts
Power (PM – Nominal)	Watts	165 (>=3%)	265 (>=3%)	325 (>=3%)
Open Circuit Voltage (VOC)	Volts	22.5	37	44.5
Short Circuit Current (Isc)	Amps	9.5	9.15	9.27
Voltage at Maximum Power (Vmp)	Volts	18.5	31	37.5
Current at Maximum Power (Imp)	Amps	8.92	8.54	8.67
Maximum System Voltage	Volts	1000	1000	1000
Solar Cells per Module	Units	36	60	72
Dimensions	L x W x T (mm)	1480 x 665 x 30	1645 x 985 x 35	1965 x 985 x 40
Weight	Kgs	15	19	23
Mounting Holes Pitch (Y)	mm	740	822	1000
Mounting Holes Pitch (X)	mm	631	945	943
Area	Sq M	0.98	1.62	1.935
Junction Box	-	3T with 2 Diode	4T with Plug Play Connector	4T with Plug Play Connector

SOLAR
TUBULAR BATTERY





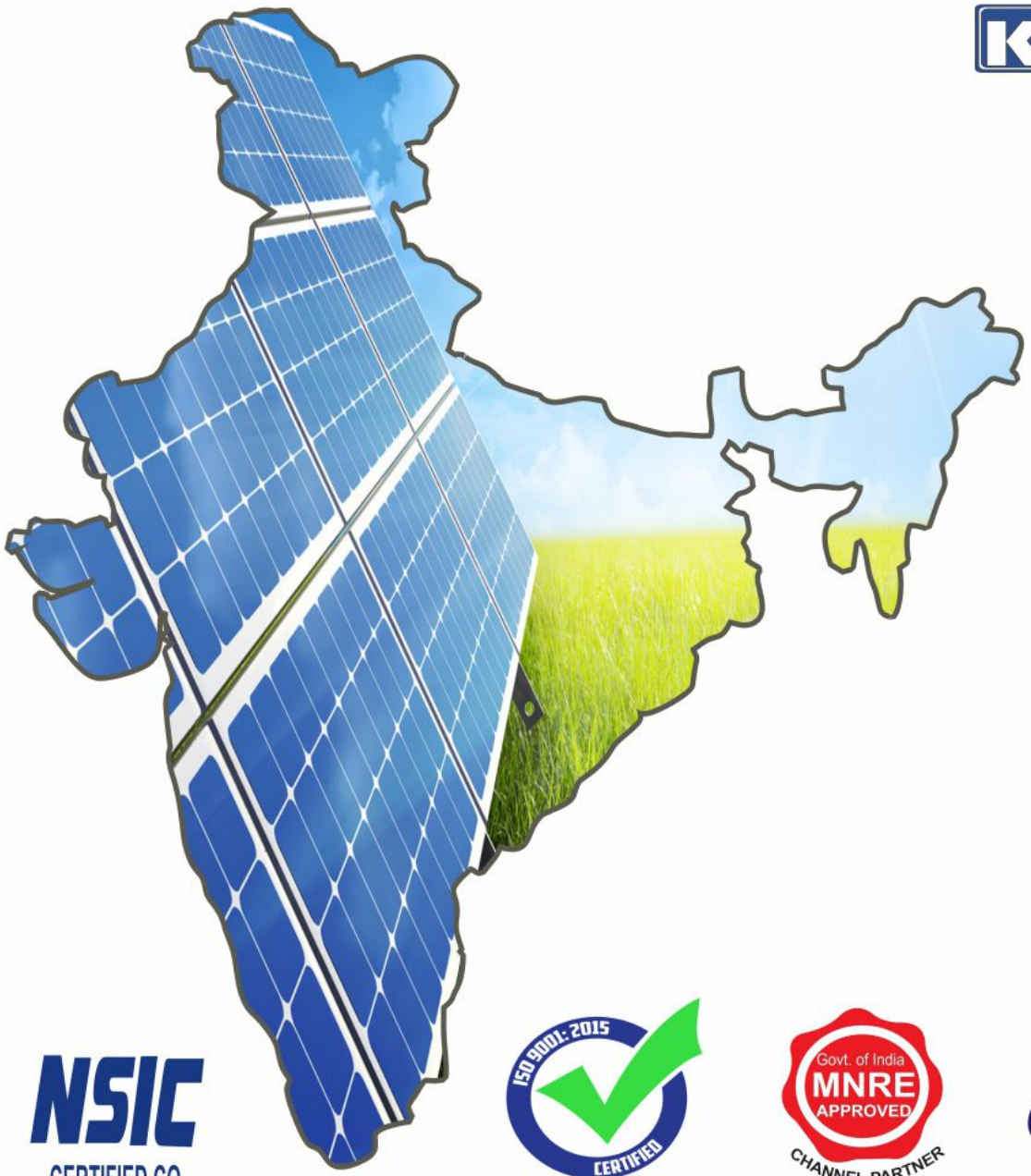
Model	
ETT155	12V
C10 Capacity at 27*C	150
Dry Weight (+/- 3%)	37.3
Net Weight (+/- 3%)	64.1

FEATURES

- Designed cycle life at C10 discharge (at 27*C, 1.85 VPC)
- Ultra low maintenance due to low antimony content.
- Excellent Ampere-hour and Watt-hour efficiency.
- Ultra low rate of self discharge.
- Ideal for cyclic applications due to superior voltage and energy output profile.
- Designed to operate in partial state of charge condition.
- Microporous ceramic vent plugs with water level indicators.
- Very efficient in hybrid applications.
- Available in 60 Months and 36 Months warranty.

NOTES

KAYAM



GeM Government eMarketplace

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ISO 9001:2015 CERTIFIED

Govt. of India MNRE APPROVED CHANNEL PARTNER

MAKE IN INDIA

RECOGNISED BY startupindia #24516



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