



PYLON
TECHNOLOGIES
PRODUCT PRESENTATION
2019

Founded in 2009

Catalogue

01 **UP Series (24V)**
24V100AH

02 **US Series (48V)**
US2000
US3000
HV hub
Installation
Force L1

03 **Powercube-X series (144V-336V)**
Powercube X1
Force-H1

04 **Powercube-H series (240V-720V)**
Powercube H1
Powercube H2

05 **Powercube-M series (32V-736V)**
Powercube M1

06 **Powercube-20H/40H**
Powercube-20H/40H

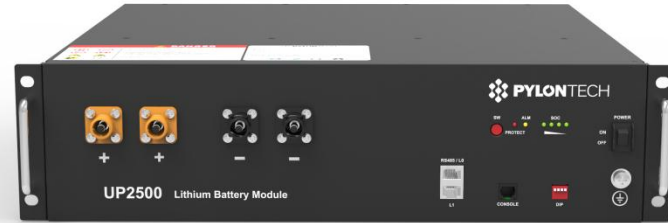
07 **Compatible Inverter list**
Low Voltage system
High Voltage System

08 **Application**

1. UP Series (24V)

UP2500-2.84kWh

- Modularization design
- Low voltage in 24V, 111Ah
- Design life: >10years
- Communication protocols: CAN, RS485
- Lead Acid battery replacement



Mechanical Characteristics

Dimensions	Width	442mm
	Depth	420mm
	Height	119mm

Weight 27.5 kg

2. US Series (48V)

US2000B -2.4kWh

- Modularization design
- Low voltage in 48V, 50Ah
- DoD: 90%
- Life cycle: 6000
- Design life: >10years
- Easy installation with brackets or cabinets
- Communication protocols: CAN, RS485
- Safety Certificate: CE, TÜV,UL, UN38.3, ROHS

Stock available in EU and Australia.



Mechanical Characteristics

Dimensions	Width	442mm
	Depth	410mm
	Height	89mm
Weight	24kg	

2. US Series (48V)

US3000-3.55 kWh

Modularization design

Low voltage in 48V, 74Ah

DoD: 90%

Life cycle: 6000

Design life: >10years

Easy installation with brackets or cabinets

Communication protocols: CAN, RS485, RS 232

Safety Certificate: CE, TÜV, UN38.3, ROHS

Stock available in EU and Australia.



Mechanical Characteristics

Dimensions	Width	442mm
	Depth	420mm
	Height	132mm

Weight	35kg
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2. US Series (48V)

LV-HUB-For communication



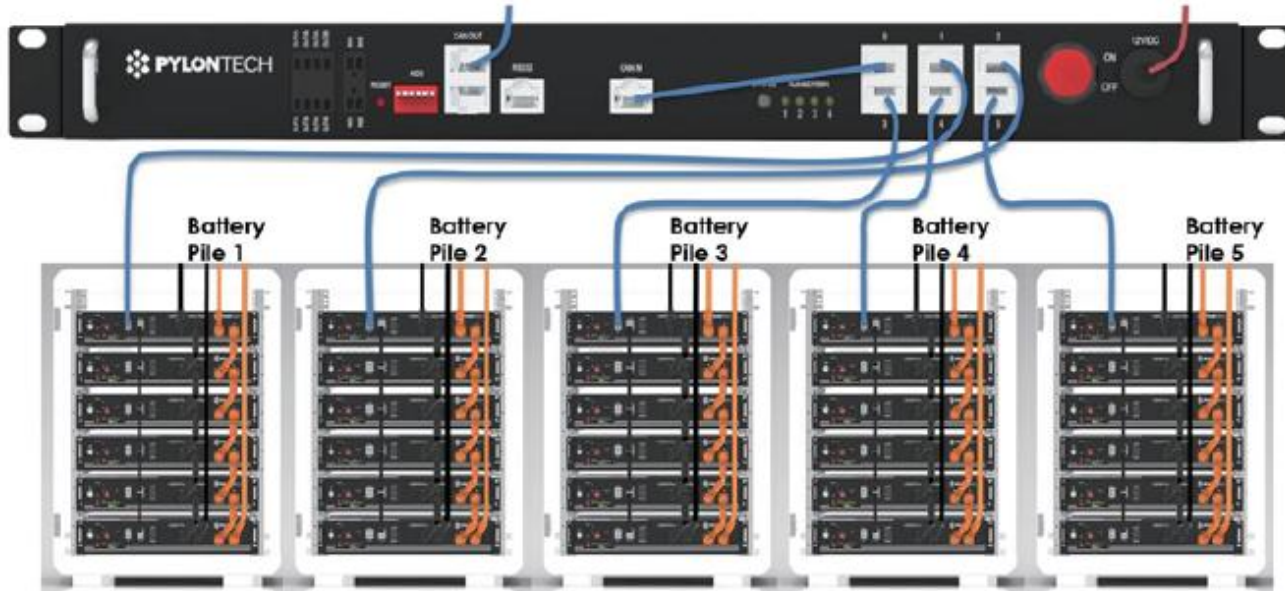
Mechanical Characteristics

Dimensions	Width	442mm
	Depth	150mm
	Height	44mm
Weight		3.5kg

2. US Series (48V)

LV-HUB

Multi Battery Piles **CAN Communication** Cable Connection
Each Communication HUB connects maximum 5 battery string.

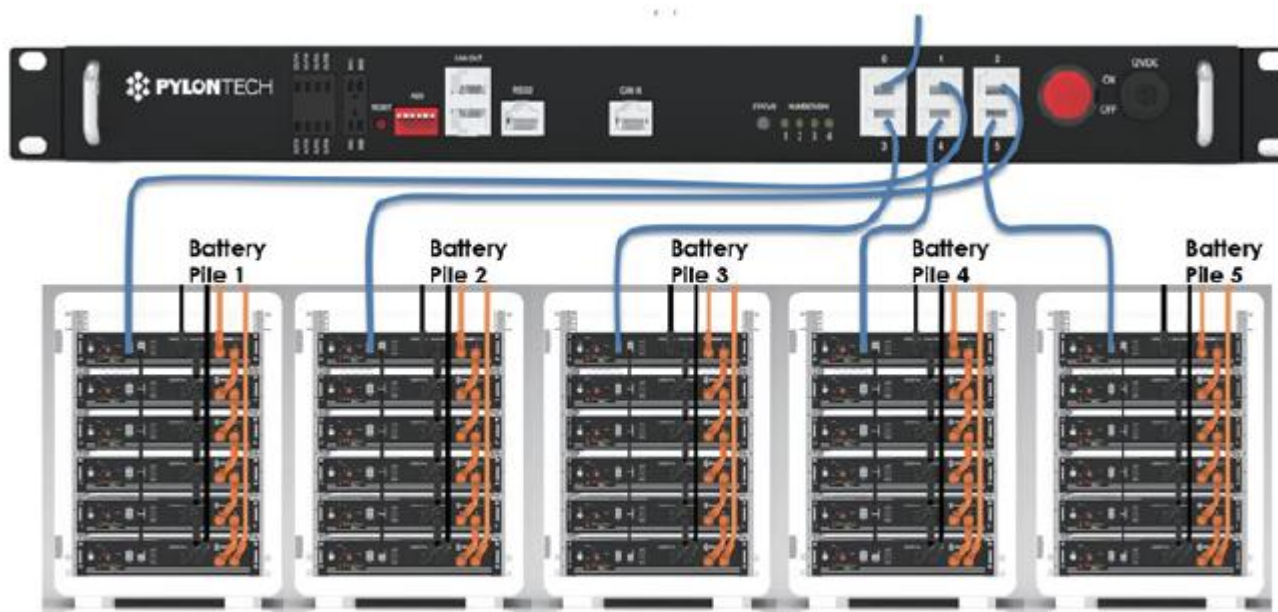


Each battery pile can configure maximum 8pcs US2000B Plus or 8 pcs US3000

2. US Series (48V)

LV-HUB

Multi Battery Piles **RS485 Communication** Cable Connection
Each Communication HUB connects maximum 5 battery string.



Each battery pile can configure maximum 8pcs US2000B Plus or 8 pcs US3000

2. US Series (48V)

Installation-Bracket



Vertical installation



Horizontal installation

2. US Series (48V)

Installation-Indoor



2. US Series (48V)

Installation-outdoor



2. FORCE –L1(48V)



3. Powercube-X series (144V-336V)

Powercube X1-Full Rack capacity: 16.8kWh

Commercial Battery Solution:

Modularization design in 48VDC in series

Battery voltage: 144V~336V

Battery Module Qty.(Optional):3-7 Pcs

DoD: 90%

Life cycle: 5000

Design life: >10years

Battery system charge Current 1C (Max.)

Communication protocols: CAN, Rs485

Safety Certificate: CE, TÜV, ROHS, UN38.3



H48050 (2.4kWh)



SC500-100S

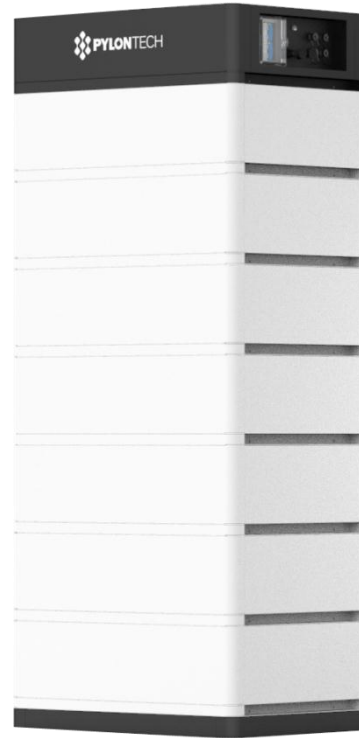


**Rack Dimension:
600(W)*505(D)*1300(H)MM**

3. Powercube-X series (144V-336V)

FORCE-H1

10.65-24.85 kWh
Flexible Mounting
Plug & Play
90% DOD



3. Powercube-X series (144V-336V)

Technical Specification

Battery Module	3	4	5	6	7
Nominal Capacity(kWh)	10.65	14.20	17.75	21.30	24.85
Voltage Range (V)	132.7~162	177~216	221.2~270	265.5~324	309.7~378
Dimension(W*D*H cm)	60*38*70	60*38*87	60*38*104	60*38*121	60*38*138
Weight(kg)	119	154	189	225	260
Depth of Discharge	90%	90%	90%	90%	90%
Charge/Discharge	14.8 (Recommend)				
Current(A)	37(Max)				
Communication	CAN, RS485				
Protection Class	IP 55				
Working Temperature(°C)	0-50				
Storage Temperature(°C)	-20-60				
Design Life	15 ⁺ Years(25°C / 77°F)				
Authentication Level	IEC62619/CE/UN38.3				

**New
Residential
Solutions**

4. Powercube-H series (240V-720V)

Powercube H1-Full Rack capacity: 36 kWh

Commercial Battery Solution:

Modularization design in 48VDC in series

Battery voltage: 240V~720V

Battery Module Qty.(Optional):5-15 Pcs

DoD: 90%

Life cycle: 5000

Design life: >10years

Battery system charge Current 1C (Max.)

Communication protocols: CAN, Rs485

Safety Certificate: CE, TÜV, ROHS, UN38.3 TLC



H48050 (2.4kWh)



SC1000-100S



Rack Dimension:

600(W)*505(D)*2140(H)MM

4. Powercube-H series (240V-720V)

Powercube H2-Full Rack capacity: 42.62 kWh

Commercial Battery Solution:

Modularization design in 48VDC in series

Battery voltage: 240V~576V

Battery Module Qty.(Optional):5-12 Pcs

DoD: 90%

Life cycle: 5000

Design life: > 10years

Battery system charge Current 1C (Max.)

Communication protocols: CAN, Rs485

Safety Certificate: CE, TÜV, ROHS, UN38.3 TLC



H48074 (3.55 kWh)



SC1000-100S



Rack Dimension:
600(W)*505(D)*2140(H)MM

5. Powercube-M series (32V-736V)

Powercube M1-Full Rack capacity: 108.93kWh

Commercial Battery Solution:

Modularization design in 48VDC in series

Battery voltage: 23V~736V

Battery Module Qty.(Optional):1-23 Pcs

DoD: 90%

Life cycle: 5000

Design life: >10years

Battery system charge Current 1C (Max.)

Communication protocols: CAN, Rs485

Safety Certificate: CE, TÜV, ROHS, UN38.3 TLC



H32148 (4.74 kWh)



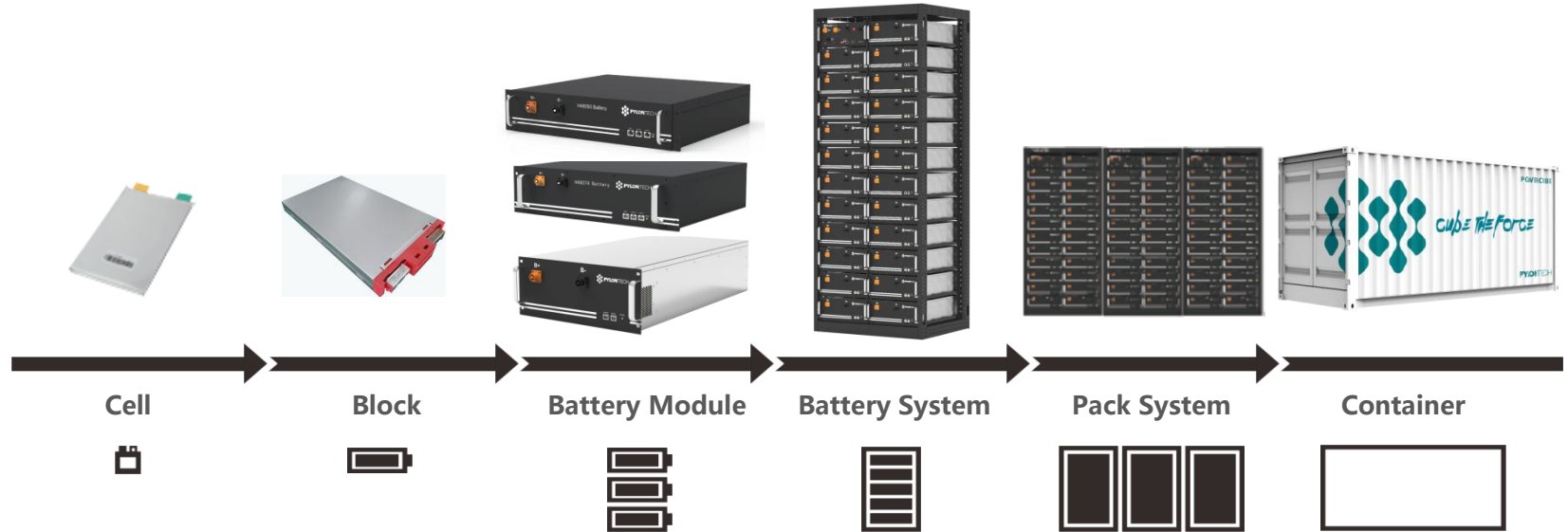
SC1000-200E



Rack Dimension:
815(W)*659(D)*2130(H)MM

6. Powercube-20H/40H

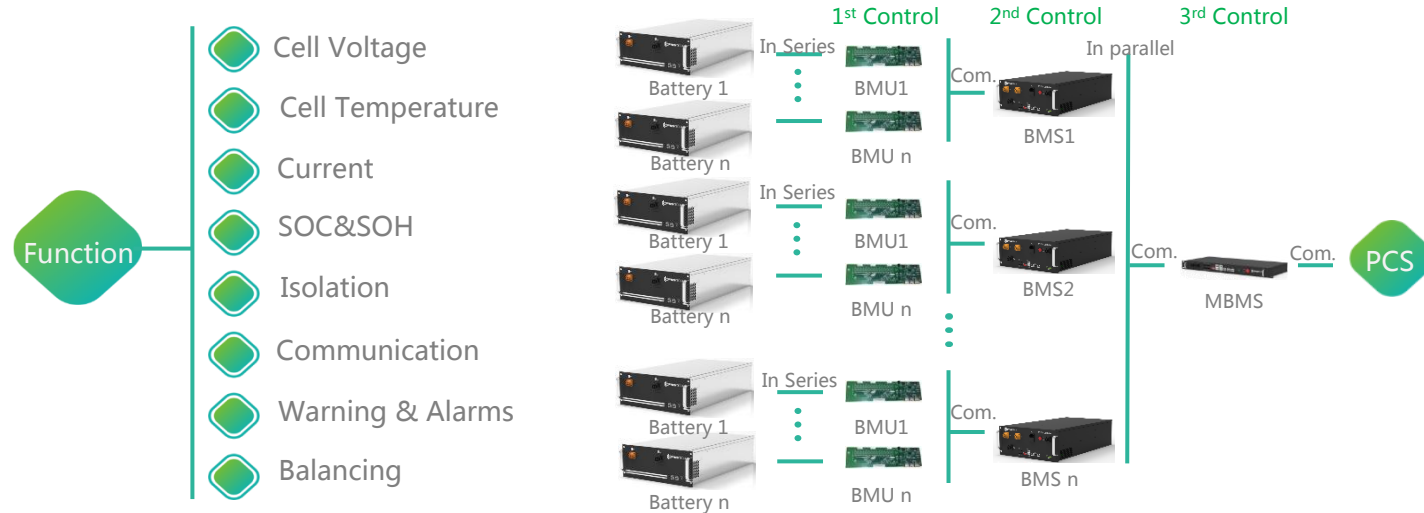
Production Flow for ESS



6. Powercube-20H/40H

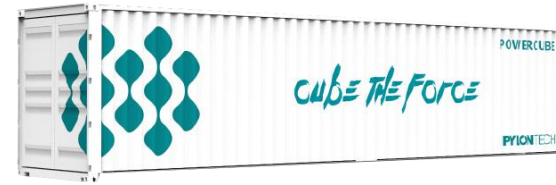
Controller – Three BMS Structure

Pylon adapt three level BMS structure(BMU, BMS and MBMS), MBMS will collect all battery BMS's situation and information, and communicate with PCS or/and EMS for good cooperation and better operation performance.



6. Powercube-20H/40H

Powercube-20H/40H



Mechanical Characteristics		20H	40H
Dimensions	Width	6.058M	12.192M
	Height	2.438M	2.438M
	Depth	2.896M	2.896M
Weight		18 Ton	35 Ton
System Voltage Range		736(690-828)Vdc	736(690-828)Vdc
System Capacity		1.3MWh	2.6MWh

7. Compatible Inverter list

compatible Inverter list-Low voltage storage system

Brand of Inverter	Inverter Type	Battery			Communication	Cable Supply	Coupling type	Application	Key Features	Firmware Ver.	Installation
		US2000	US3000	Phantom-3							
Victron	Multi / Quattro 48V (via Venus-device)				CAN	RJ45	DC	On/off-grid	Activation: Yes; Force charge: Yes	422/V2.15	Wall mounting
SolaX	SK-SU, SK-TL, SK-BMU				CAN/RS232	RJ45	DC/AC	On-grid	Activation: PV only; Force charge: Yes		Wall mounting
Goodwe	GW-BP/BBP GW-ES/EBM				CAN	RJ45	DC/AC	On-grid	Activation: Yes; Force charge: Yes		Wall mounting
IMEON	IMEON 3.6 89.12				CAN	RJ45	DC/AC	On/off-grid	Activation: Yes; Force charge: Yes	V1.7.6.5	Wall mounting
Studer Innotec	Xtender 48V serie VarioString serie VarioTrack 48V serie				CAN	RJ45	DC	On/off-grid	Activation: No; Force charge: Yes	R652	Wall mounting
Seleetric	SPMC In 48V				CAN	RJ45	DC	On/off-grid	Activation: No; Force charge: Yes		Wall mounting
Volttronic	Infinisolar series 48V Apert series 48V**				RS485(9600)	RJ45	DC	On/off-grid	Activation: Yes Force charge: Yes	V1.00/00.32	Wall mounting
Solar	ME3000SP, HYD series				RS485(115200)/ CAN	RJ45	AC	On-grid	Activation: No; Force charge: Yes	V1.2	Wall mounting
Solis	RHI-3K-SK-48ES				CAN	RJ45	DC	On/off-grid	Activation: PV only; Force charge: Yes	90009	Wall mounting
Redback	SH5000				RS485(115200)	RJ45	DC/AC	On-grid	Activation: PV only; Force charge: No		Vertical
Lux Power	LXP Hybrid/ACS series				CAN	RJ45	DC/AC	On-grid	Activation: Yes; Force charge: Yes	AA1.0	Wall mounting
Sungrow	SH5K				CAN	Terminal	DC	On-grid	Activation: 30mins; Force charge: Yes	V13	Wall mounting
Delos	DL3/C series DL5 AC series				CAN	RJ45	DC/AC	On/off-grid	Activation: No; Force charge: Yes	A 1.30; B 1.18; C1.27	Wall mounting
MLT	Oasis 448, 648				N/A	N/A	AC	Off-grid	Activation: No; Force charge: Yes	V2.19	Wall mounting
Steca	Solarix FLI 5000-48				N/A	N/A	DC	Off-grid	Activation: Manual; Force charge: No		Wall mounting
SolarMax	ES series AC series				CAN	RJ45	DC/AC	On/off-grid	Activation: No; Force charge: Yes	A 1.30; B 1.18; C1.27	Wall mounting
Growatt	SPH5000				CAN	RJ45	DC/AC	On/off-grid	Activation: No; Force charge: Yes	RA1.0	Wall mounting
AXIOMA energy	ISPWM 5000 ISMPFT BF 3000 - 5000 ISGRID (BF) 3000 - 5000				N/A	N/A	DC	On/off-grid	Activation: No Force charge: No		Wall mounting
Kehua	SPH5000-BL				CAN	RJ45	DC/AC	On-grid	Activation: Yes; Force charge: Yes	V1.00.013	Wall mounting
GMDE	SolDate 3700TL+BM024				RS485(9600)	RJ45	DC/AC	On-grid	Activation: No; Force charge: Yes	V2.0.1	Wall mounting
Dowel	iPower				RS485(9600)/CAN	Terminal	DC/AC	On-grid	Activation: PV only; Force charge: Yes	V3.03	Wall mounting

7. Compatible Inverter list














Compatible Inverter list-High voltage storage system

Brand of Inverter	Type	Battery	Communication	Cable Supply	Coupling type	Application	Key Features	Firmware Ver.	Installation
SolaX	X1/X3-Hybrid HV	Powercube X1/H1/H2, Force H1	CAN	RJ45	DCAC	On-grid	Activation: Yes Force charge		Wall mounting
Sematec	SMT-10K/30K/50K-TL-TH	Powercube X1/H1/H2, Force H1	CAN	RJ45	DCAC	On-grid	Activation: Yes Force charge		Wall mounting
Efacec	Battery Inverter	Powercube H1/H2/M1	Customized with additional EMS	RJ45	AC	On/off-grid			Cabinet
Ferroamp	EnergyHub								
Sungrow	SC series								
Sinexcel	PWS/PWG series								
Kehua	BCS series								

8. Application

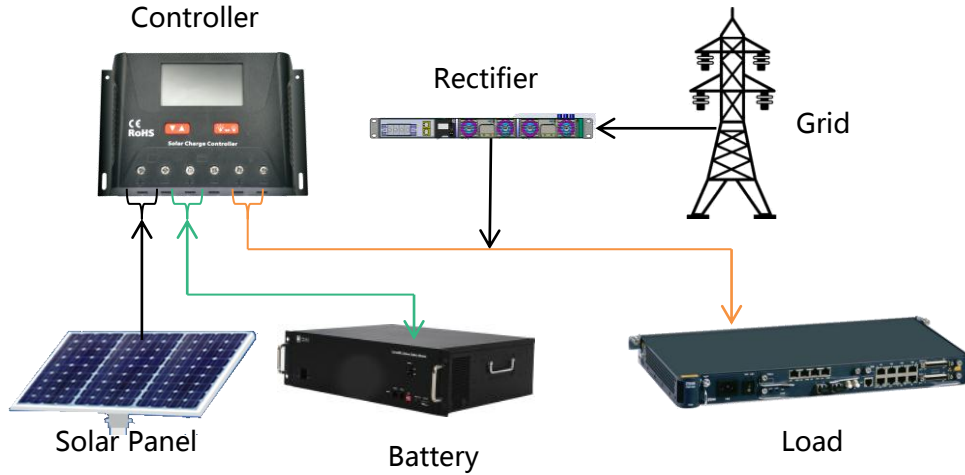
Application-Overall



Low Voltage Storage system products			High Voltage Storage system products		
UP series	US series		Powercube X series	Powercube H/M series	Powercube-20H/40H
			<p>Force-H1 X1</p> 	<p>H1 H2 M1</p> 	<p>20H/40H</p> 
				 	
Back Up	Telecome	Home storage	Home storage	Commercial Storage	Grid Storage

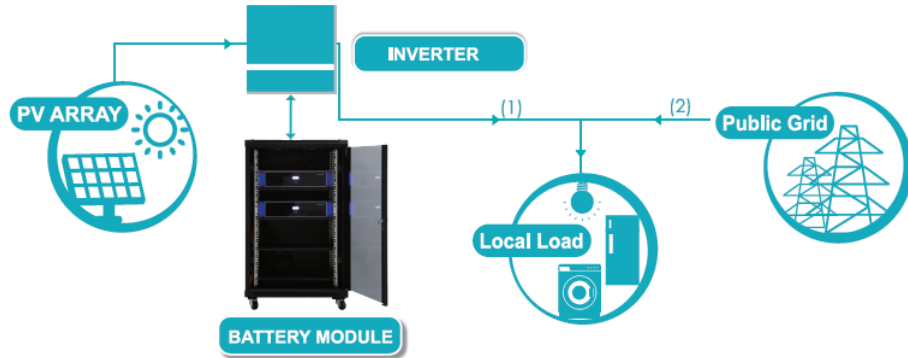
8. Application

Application-Telecom



8. Application

Application-Residential



On Grid



Off Grid

8. Application

Application-Commercial/Industrial/Grid

