

Solar Combiner Box

www.zjbeny.com



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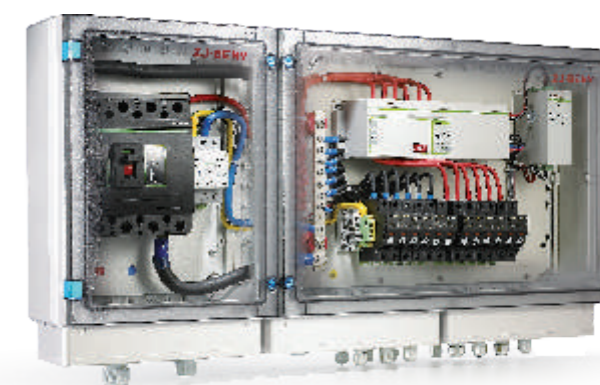
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 If the models and specifications in this product catalogue is changed due to the change of products, we will not inform.



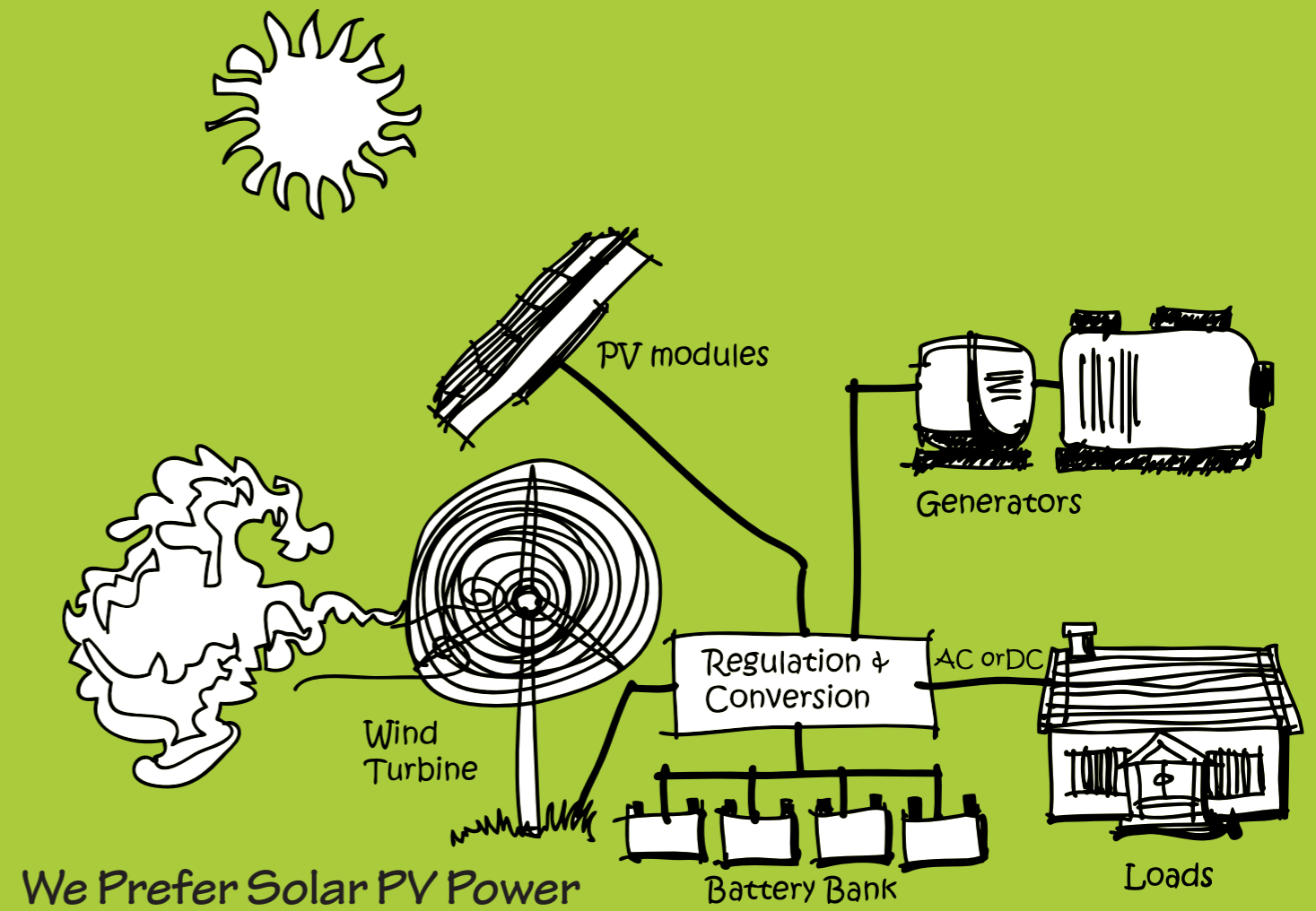
Leading Manufacturer for
PV Solution



Beny's commitment: Making More Reliable and safer Solar PV Solutions

Our PV Products Including:

- PV DC Isolator switch
- PV DC MCB
- PV DC MCCB
- PV DC Fuse Holder
- PV DC Surge surge protection device
- PV DC monitoring device
- PV DC String Combiner Box



Leading Supplier for Solar Photovoltaic Components



BENY Electrical Production Base in Wenzhou

COMPANY PROFILES



Leading Manufacturer for
PV Solution

ZJ·BENY is one of pioneer in china in the development, production and sales of photovoltaic (PV) DC string combiner box .We mainly manufacturing DC isolator ,DC circuit breaker, DC fuse ,DC surge protection device and smart monitoring device.

With more than 25 years experiences in traditional electrical area we could provides powerful support for the renewable business.

With each product is backed by the skills and service of dedicated team of customer-focused specialists, we have been striving to provide high-quality products for residential, commercial and utility-scale solar projects, we strictly make the management as per the ISO9001:2008

So far we have already obtained TUV / ROHS / CE / SAA /CB / SEMKO / VDE / CCC / CQC certifications.

ZJ·BENY Enjoys a ready market in many countries and areas, our products are widely exported to Australia, Japan, Germany, Malaysia, South Africa, Sri Lanka ,Indonesia, Middle East countries.

Our primary customers include Engineering Procurement Contractors (EPCs), solar developers, Real Estate developers, Electrical distributors and contractors, and Solar Financing companies with solar installations .

ZJ·BENY is dedicated to make the solar power more reliable and safe.

Mission:

Making Solar PV Power System More Reliable and Safe

Value:

Honesty, Responsibility, Innovation

Faith:

People-oriented, creating value; Scientific management, keeping developing

Quality policy:

Create the Best Products and Superb Service

Social Responsibility:

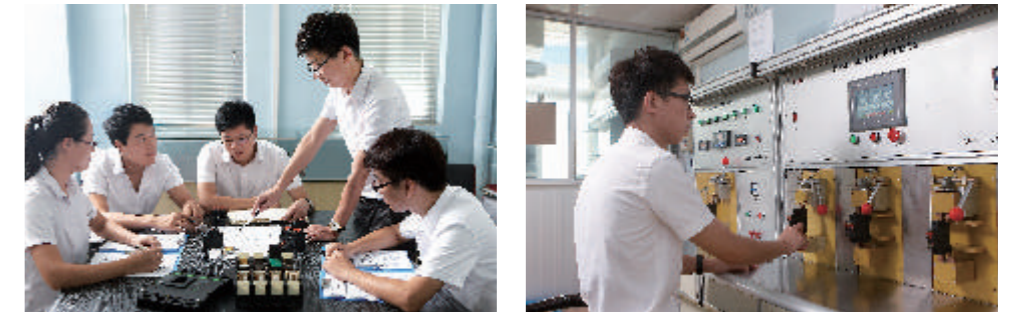
Devote us to improve the quality of life of the workforce and their families as well as the local community and society at large and to behave ethically in business and contribute to economic development.

Making superb Product ,Creating Top Brand

MANUFACTURING



Photovoltaic DC components production workshop



The ZJ·BENY Quality Management System, which includes this Policy, provides the framework through which a formal and continuing program of review is adopted and fully supported so that products, services and the effectiveness of systems, policies, objectives and targets may be continually measured and improved as far as possible. ZJ·BENY defines Quality as conformance to our Customers' needs, both internally and externally, and as conformance to all defined quality system requirements. Consequently, we recognise the value of our customers and the impact of our activities upon them.

ZJ·BENY

Pursue zero product Defect,
Strict quality control



Smart junction box production workshop



Strict quality control

Quality is life, quality is competition, with perfect products we won long-term customer. For every product we exported, we got 100% positive feedback in Australia, Europe, USA and South-east Asia.

Strong R&D capacity

Professional engineers with 25 years experience in traditional electrical products, now we build a gradient-type R&D team to develop series DC products for PV.

ADVANTAGE

MARKETING SERVICE

Dedicated to the global sale of ZJ·BENY brand products



+86-577-57177222
Email: benyi@zjbeny.com



Industry custom service all over the world

SUCCESSFUL CASES



Location: Western Australia



Location: Poland



Location: Beinwil, Switzerland



Location: Jiangxi, China



Location: South Africa



Location: Tamilnadu, India



Location: California, USA



Location: Japan



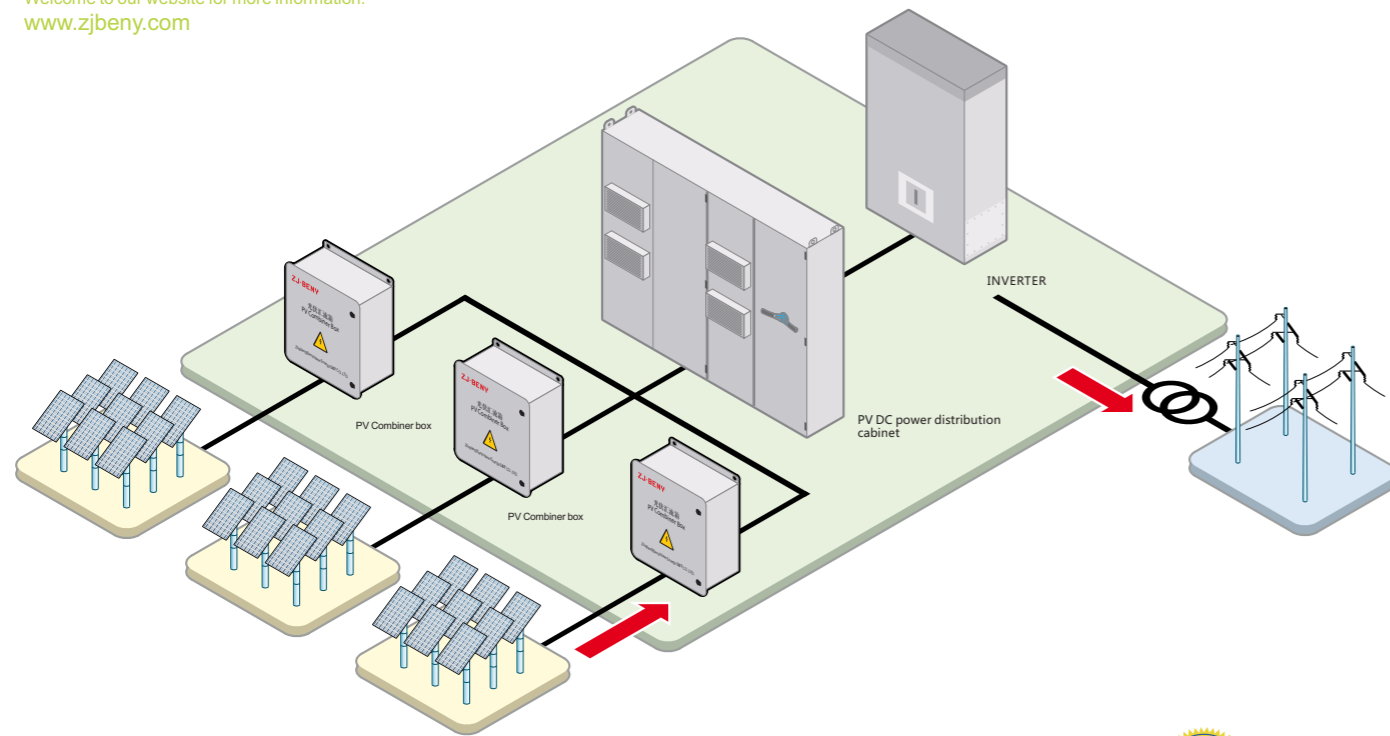
Location: Hunan, China

CERTIFICATE



Photovoltaic Power Station System

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Product selection

Diagram	ZJ·BENY Product
String Combiner Boxes	<p>BHS BHSZ</p>
String Combiner Boxes	<p>BHT BHTZ BHTZ-R</p>
PV DC power distribution cabinet	

ZJ·BENY DC combiner box is used for the link of PV inverter and PV array to lessen the cable for the connecting, easy to maintain and improve the reliability. The combiner box is designed based on high performance and efficiency; it is the supporting components of our PV inverter for the PV power generating. you could connect a certain number of PV components in series to be the PV

ZJ·BENY

Application

ZJ·BENY PV String DC Combiner Boxes are key components in the PV Solar power systems, which are placed between Solar Modules and the Inverters.

Features

- **Efficient Protection Grade IP65/66**
ZJ·BENY Combiner box is waterproof, dust proof and anti-corrosion, withstand harsh environmental exposure.
- **PV Solar string Current Aggregation**
Multiple strings input, one string output, Available for 1~24 strings, Max current 30 A per string.
- **Effective Isolating**
ZJ·BENY Series Isolator Switches, current 16 A to 630A, Max voltage up to 1500V DC, widely meet the various demands from PV power systems.
- **Lightning Protection**
ZJ·BENY BU-40/3 Surge protector device with pluggable design, up to 1000V DC, 40KA, with lightning protection for PV power system.
- **Over-current Protection and Short-circuit Protection**
ZJ·BENY BR-30 touch-safe fuse with LED indicator light the function is over current protection.
ZJ·BENY BD and BB1 series circuit breaker, with the function of Short-circuit protection and over current protection, the Max current up to 630A, Max voltage up to 1000 V DC.

Functions

- Simplify the physical wiring between solar panel and inverter
 - Fault current protection for each PV String
 - Fault alarm
 - Easy installation and maintenance
- **Intelligent Monitoring**
Monitoring of stings with RS 485, Modbus communication measure current and DC voltage for each string, monitoring the status of DC disconnecter /SPD
 - **Wireless Communication**
ZJ·BENY Smart monitoring device, wireless communication, LED indication light placed outside of enclosure for fault alarm(optional)
 - **Busbar Design**
 - **Customized Solutions**
 - **Pre-wired Items, Easy Installation and Maintenance**



Advantage of Polycarbonate enclosure

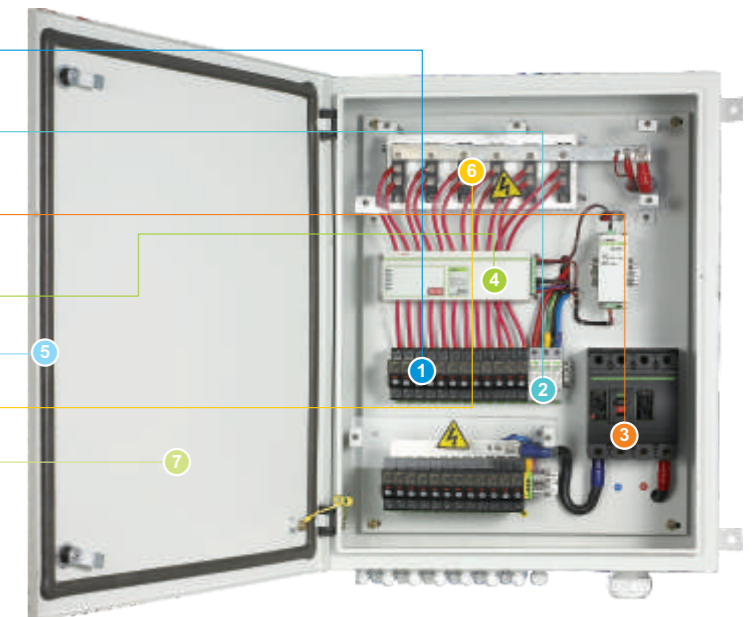
- Very high impact resistance
- Easy machining with normal tools
- IP66
- Wide operation temperature range
- Fire Resistance
- Non-conductive
- Good resistance to chemical corrosion
- Light weight
- Good UV resistance
- Excellent insulating properties
- Cost-effective material for harsh environments

Advantage of Powder coated Stainless steel/Steel enclosure

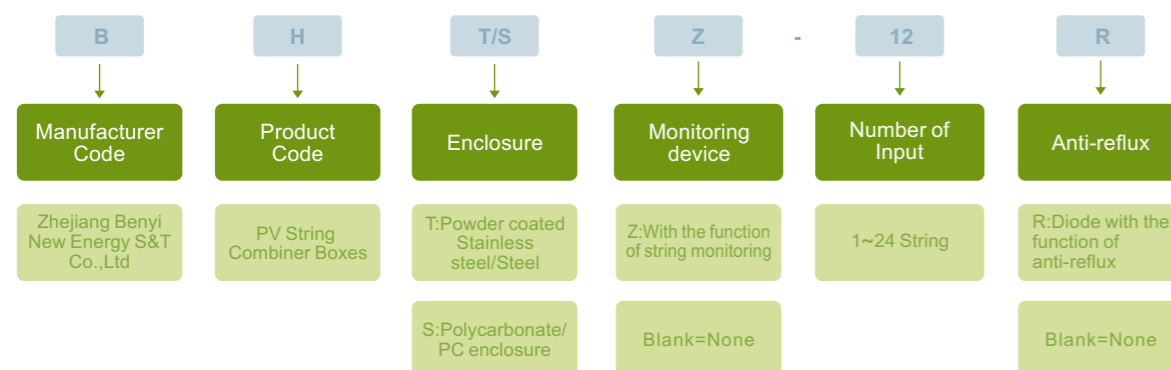
- Thickness $\geq 1.5\text{mm}$ Powder coated cold rolled
- Surface finish: with the process of pickling and parkerising 80-120 μm
- IP65 waterproof, dust proof, anti-corrosion and UV resistance
- Durable: BHT series combiner boxes are built to withstand harsh environmental exposure
- Suit for long distance transport

Structure diagram

- 1 **ZJ·BENY** BR-30 Touch-safe PV fuse holder with LED indication light ,1000V DC 30A
- 2 **ZJ·BENY** BU-40 β Surge protector device , pluggable design up to 1000V DC 40KA
- 3 **ZJ·BENY** BD series Circuit breakers ,1000V DC Max current 630A ,meeting the demands of PV systems
- 4 **ZJ·BENY** BYSN smart monitoring device (wireless communication could be selected)
- 5 Poured-in-place gaskets for superior moisture resistance
- 6 Diode with the Function of Anti -Reflux
- 7 Powder Coated steel Powder coated stainless steel / Polycarbonate enclosure optional) Protecting up to IP65 /IP66 ,customize solution



Type Instruction



Component Advantage

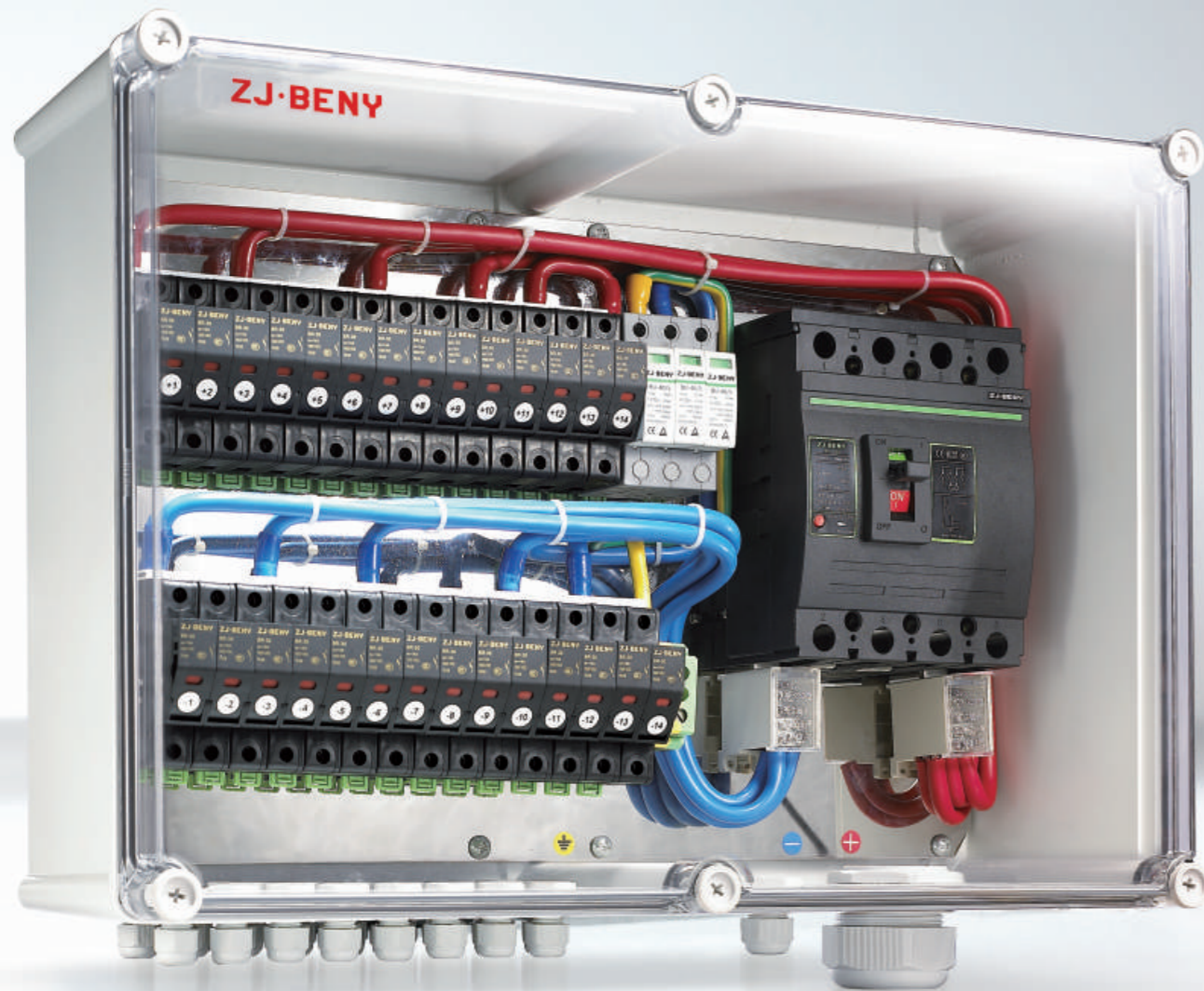
ZJ·BENY components inside combiner box is designed and developed based on 25 years experiences in traditional electrical components . Please find the detail instruction from other catalogue 《Beny components instruction》

Enclosure type	ZJBENY PV DC MCCB	ZJBENY DC Isolator	ZJBENY DC FUSE HOLDER	ZJBENY DC SPD	ZJBENY smart monitoring device
BHS OR BHSZ Series (polycarbonate)	BB1-63 63A	BYH.2-32 32A	BR-30(1000V,30A)	BUD-40/3	BYSN-8
BHT / BHTZ/BHTZR Series (Powder coated stainless steel)	BD-125 50~125A	BB1H-63 63A	Touch-safe	1000V I _{max} 40KA	BYSN-12
(Powder coated steel)	BD-160 160A	BDH-125 125A	LED indicator light		BYSN-16
	BD-200 200A	BDH-200 200A			BYSN-24
	BD-250 250A	BDH-250 250A			Wireless communication(optional) LED indication light placed outside of enclosure alarm for the fault (optional)
	BD-400 400A	BDH-400 400A			
	BD-630 630A	BDH-630 630A			

BHS

Series Solar Combiner Box with Polycarbonate(PC) Enclosure

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BHS

Series Solar Combiner Box with Polycarbonate(PC) Enclosure

Parameter

Type	BHS-2	BHS-4	BHS-6	BHS-8	BHS-10	BHS-12	BHS-16	BHS-20	BHS-24
Dimensions(LXWXH)	250x250x300	250x350x150	560x380x180	560x380x180	560x380x180	600x400x220	600x400x220	700x500x300	800x600x300
Weight	4KG	8KG	14KG	15KG	16KG	17KG	19KG	30KG	32KG
Casing	Polycarbonate(PC)								
IP Protection Class(IEC60529)	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
IK Impact Resistance Classe(IEC62262)	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Electrical Properties									
Max.Rated Voltage DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Fuse Holder	1000V DC 30A								
DC Switching /MCCB Capacity	25A	50A	80A	100A	125A	160A	225A	315A	350A
Surge Protection DC	Type II/In=20KA,Imax=40KA,Ucpv=1000V DC								
Over-Voltage Category	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III
String Monitoring Device	-								
Diode for The Function of Anti -Reflux	-								
UV Resistance	Yes								
Inputs									
Number of DC Inputs	2	4	6	8	10	12	16	20	24
Connection Type DC Input	PG09,IP68(MC4 Optional)								
Input Cable Size for Negative and Positive	Ø4-8mm								
Input Fuse	10A/15A/20A/25A								
Outputs									
Number of DC Outputs	1	1	1	1	1	1	1	1	1
Connection Type DC Output	PG 36 ,IP68,Ø22-32mm(Be Customized)								
Gland Connectors	Material :Nylon Plastic, Seals: Nitrile Rubber Buna, IP68								
Connection DC Earth Protection	PG16,IP68,Ø10-14mm								
Environmental									
Ambiant Temperature Range/Humidity	Temperature: -20 ~+60 Humidity: 0-99%								
Altitude	2000m 2000m Derating								
Installation	Wall mounting/ Padlockable Latch								

Application



BHSZ

Series Polycarbonate(PC) Solar Combiner Box with Smart monitoring device

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BHSZ

Series Polycarbonate(PC) Solar Combiner Box with Smart Monitoring Device

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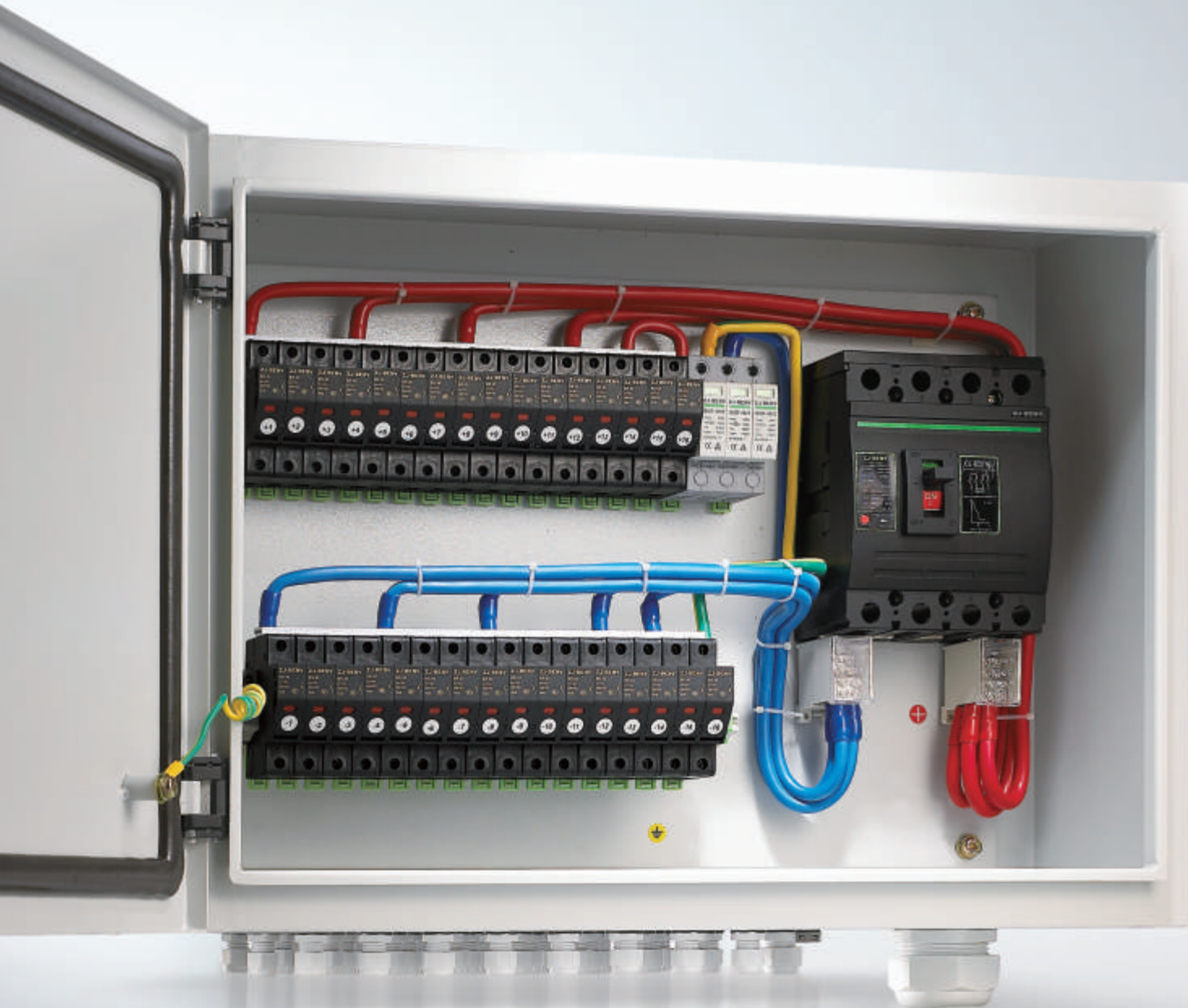
Parameter

Type	BHSZ-4	BHSZ-6	BHSZ-8	BHSZ-10	BHSZ-12	BHSZ-16	BHSZ-20	BHSZ-24
Dimensions(LXWXH)	600x400x220	400x600x220	400x600x220	600x600x170	600x600x170	535x735x270	800x600x214	800x600x300
Weight	12KG	18KG	20KG	22KG	25KG	26KG	30KG	32KG
Casing	Polycarbonate(PC)							
IP Protection Class(IEC60529)	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
IK Impact Resistance Classe(IEC62262)	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Electrical Properties								
Max.Rated Voltage DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Fuse Holder	1000V DC 30A							
DC Switching /MCCB Capacity	50A	80A	100A	125A	160A	225A	315A	350A
Surge Protection DC	Type II/In=20KA,Imax=40KA,Ucpv=1000V DC with Remote Contact							
Over-Voltage Category	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III
UV Resistance	Yes							
String Monitoring Device								
String Monitoring Device	Yes							
Diode for The Function of Anti -Reflux	-							
Protocol	RS485/MODBUS-RTU							
Wireless Communication	Optional							
Monitoring Function Details	Monitoring DC voltage and current of sub-array. Monitoring the Temperature							
Power Supply	Self-Supplied DC 24V							
Inputs								
Number of DC Inputs	4	6	8	10	12	16	20	24
Connection Type DC Input	PG09,IP68(MC4 Optional)							
Input Cable Size for Negative and Positive	Ø4-8mm							
Input Fuse	10A/15A/20A/25A							
Outputs								
Number of DC Outputs	1	1	1	1	1	1	1	1
Connection Type DC Output	PG 36 ,IP68,Ø22-32mm(Be Customized)							
Gland Connectors	Material :Nylon Plastic, Seals: Nitrile Rubber Buna, IP68							
Connection DC Earth Protection	PG16,IP68,Ø10-14mm							
Environmental								
Ambiant Temperature Range/Humidity	Temperature: -20 ~+60 ,Humidity: 0-99%							
Altitude	2000m ,2000m Derating							
Installation	Wall mounting/ Padlockable Latch							

BHT

Series Solar Combiner Box with Powder Coated Steel/Powder Coated Stainless Steel

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BHT

Series Solar Combiner Box with Powder Coated Steel/Powder Coated Stainless Steel

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Parameter

Type	BHT-4	BHT-6	BHT-8	BHT-10	BHT-12	BHT-16	BHT-18	BHT-20	BHT-24
Dimensions(LXWXH)	450x250x150	500x400x210	500x400x210	500x400x210	600x400x210	600x400x210	650x400x210	750x500x250	800x600x300
Weight	21KG	23KG	25KG	27KG	28KG	35KG	45KG	50KG	55KG
Casing	Powder Coated steel /Powder coated stainless steel								
IP Protection Class(IEC60529)	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66
IK Impact Resistance Classe(IEC62262)	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Electrical Properties									
Max.Rated Voltage DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Fuse Holder	1000V DC 30A								
DC Switching /MCCB Capacity	50A	80A	100A	125A	160A	225A	250A	315A	350A
Surge Protection DC	Type II/In=20KA,Imax=40KA,Ucpv=1000V DC								
Over-Voltage Category	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III
String Monitoring Device	-								
Diode for The Function of Anti-Reflex	-								
Inputs									
Number of DC Inputs	4	6	8	10	12	16	18	20	24
Connection Type DC Input	PG09,IP68(MC4 Optional)								
Input Cable Size for Negative and Positive	Ø4-8mm								
Input Fuse	10A/15A/20A/25A								
Outputs									
Number of DC Outputs	1	1	1	1	1	1	1	1	1
Connection Type DC Output	PG 36 ,IP68,Ø22-32mm(Be Customized)								
Gland Connectors	Material :Nylon Plastic, Seals: Nitrile Rubber Buna, IP68								
Connection DC Earth Protection	PG16,IP68,Ø10-14mm								
Environmental									
Ambiant Temperature Range/Humidity	Temperature: -20 ~+60 Humidity: 0-99%								
Altitude	2000m 2000m Derating								
Installation	Wall mounting/ Padlockable Latch								

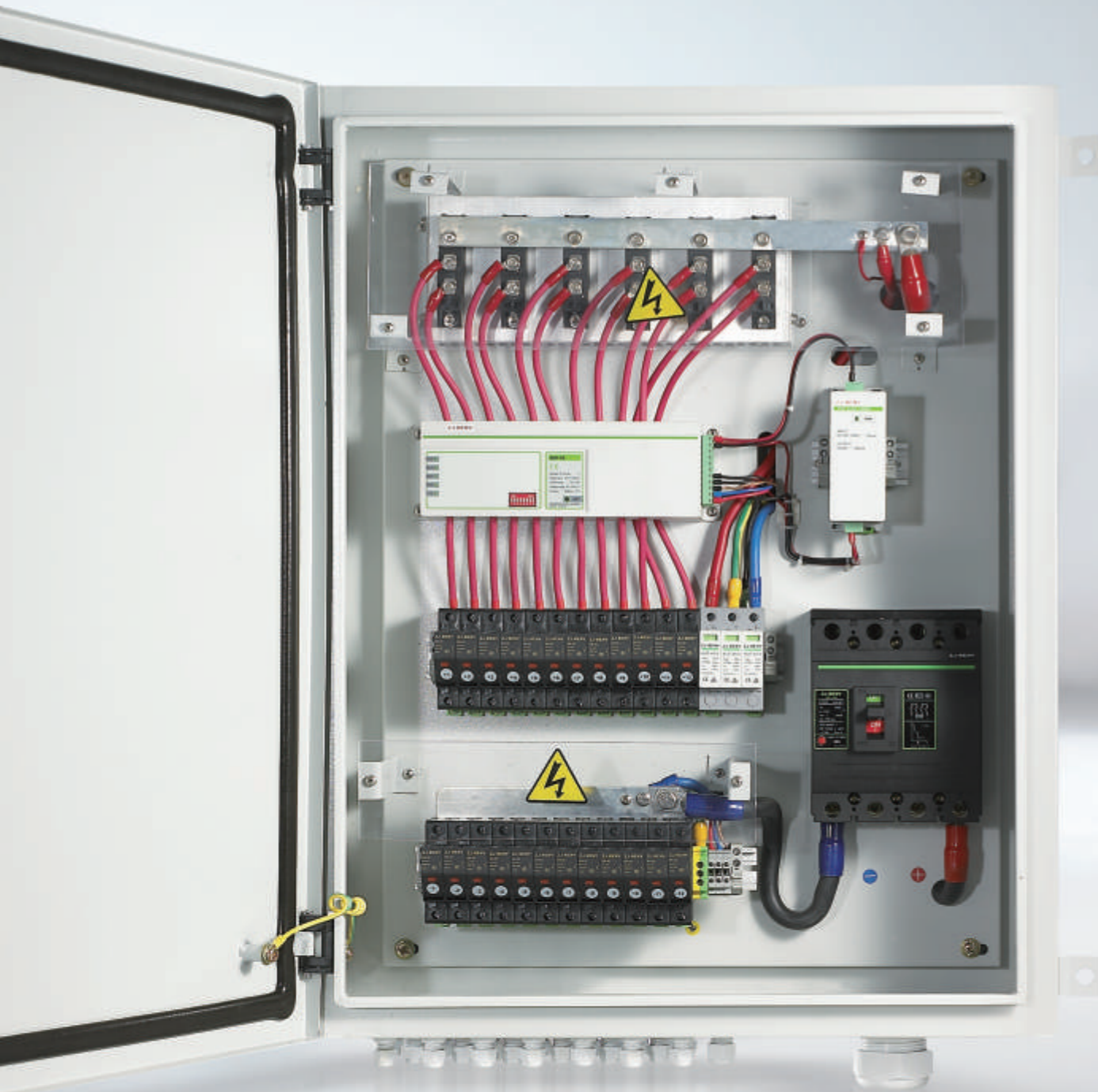
Application



BHTZ

Series Powder Coated steel/Powder Coated Stainless Steel
Solar Combiner Box with Smart Monitoring Device

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BHTZ

ZJ·BENY

Series Powder Coated Steel/Powder Coated Stainless Steel
Solar Combiner Box with Smart Monitoring Device

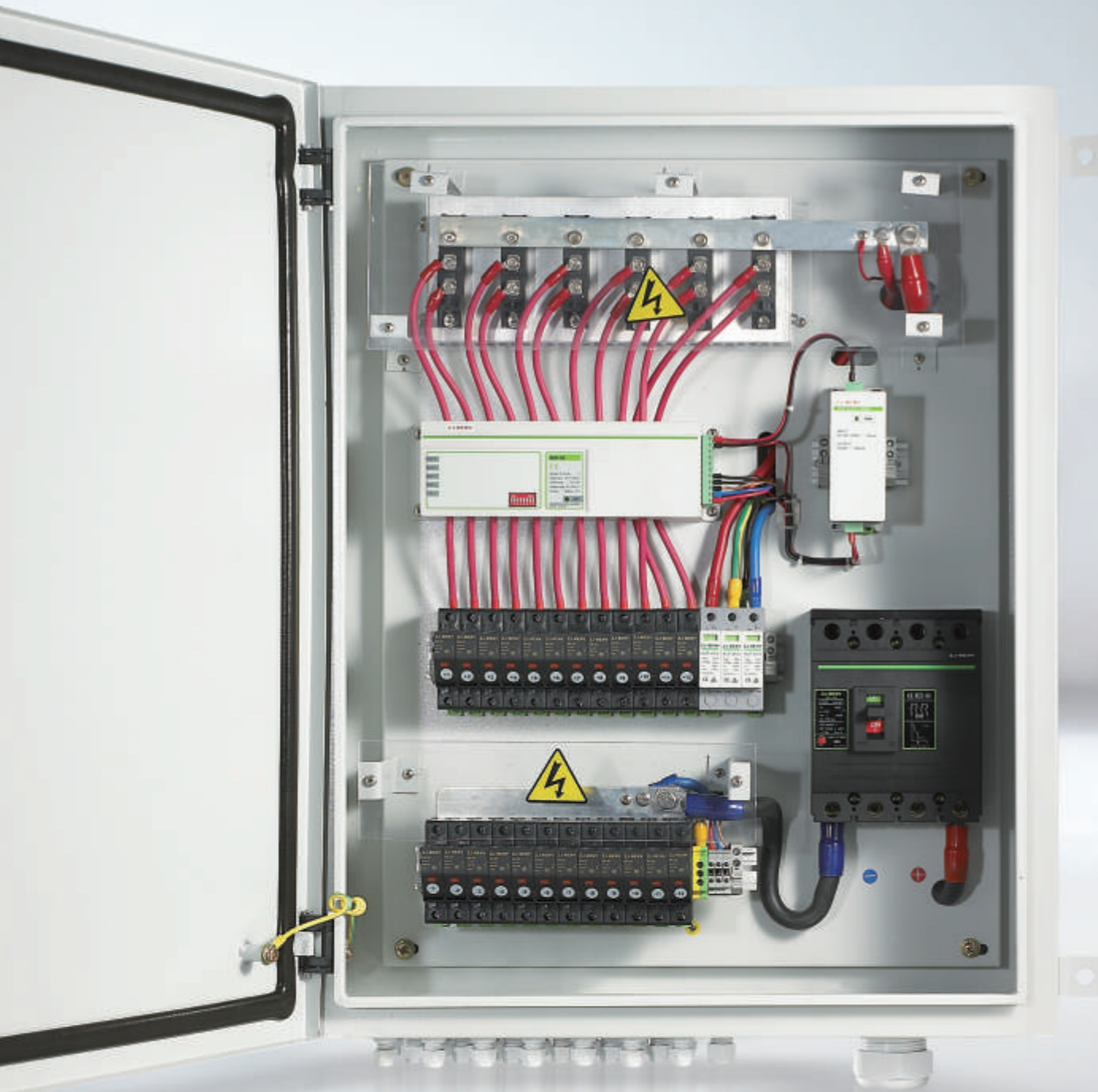
Parameter

Type	BHTZ-4	BHTZ-6	BHTZ-8	BHTZ-10	BHTZ-16	BHTZ-18	BHTZ-20	BHTZ-24
Dimensions(LXWXH)	500x550x180	600x480x210	600x480x210	650x480x210	600x650x210	650x650x210	800x750x250	800x800x300
Weight	25KG	28KG	30KG	32KG	34KG	35KG	50KG	55KG
Casing	Powder Coated steel /Powder coated stainless steel							
IP Protection Class(IEC60529)	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66
IK Impact Resistance Classe(IEC62262)	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Electrical Properties								
Max.Rated Voltage DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Fuse Holder	1000V DC 30A							
DC Switching /MCCB Capacity	50A	80A	100A	125A	160A	225A	315A	350A
Surge Protection DC	Type II/In=20KA,Imax=40KA,Ucpv=1000V DC with Remote Contact							
Over-Voltage Category	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III
String Monitoring Device								
String Monitoring Device	Yes							
Diode for The Function of Anti -Reflux	-							
Protocol	RS485/MODBUS-RTU							
Wireless Communication	Optional							
Monitoring Function Details	Monitoring DC voltage and current of sub-array, Monitoring the Temperature							
Power Supply	Self-Supplied DC 24V							
Inputs								
Number of DC Inputs	4	6	8	10	12	16	20	24
Connection Type DC Input	PG09,IP68(MC4 Optional)							
Input Cable Size for Negative and Positive	Ø4-8mm							
Input Fuse	10A/15A/20A/25A							
Outputs								
Number of DC Outputs	1	1	1	1	1	1	1	1
Connection Type DC Output	PG 36 ,IP68,Ø22-32mm(Be Customized)							
Gland Connectors	Material :Nylon Plastic, Seals: Nitrile Rubber Buna, IP68							
Connection DC Earth Protection	PG16,IP68,Ø10-14mm							
Environmental								
Ambient Temperature Range/Humidity	Temperature: -20 ~+60 ,Humidity: 0-99%							
Altitude	2000m 2000m Derating							
Installation	Wall mounting/ Padlockable Latch							

BHTZ-R

Series Powder Coated Steel/Powder Coated Stainless Steel
Solar Combiner Box with Smart Monitoring Device and Diode

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BHTZ-R

Series Powder Coated Steel/Powder Coated Stainless Steel
Solar Combiner Box with Smart Monitoring Device and Diode

ZJ·BENY

Parameter

Type	BHTZ-4R	BHTZ-6R	BHTZ-8R	BHTZ-10R	BHTZ-12R	BHTZ-16R	BHTZ-20R	BHTZ-24R
Dimensions(LXWXH)	500x650x180	650x650x210	650x650x210	750x650x210	750x650x210	850x650x210	800x1000x250	800x1000x300
Weight	28KG	30KG	32KG	34KG	36KG	40KG	52KG	58KG
Casing	Powder Coated steel /Powder coated stainless steel							
IP Protection Class(IEC60529)	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66	IP65/IP66
IK Impact Resistance Classe(IEC62262)	IK08	IK08	IK08	IK08	IK08	IK08	IK08	IK08
Electrical Properties								
Max.Rated Voltage DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Fuse Holder	1000V DC 30A							
DC Switching /MCCB Capacity	50A	80A	100A	125A	160A	225A	315A	350A
Surge Protection DC	Type II/In=20KA,Imax=40KA,Ucpv=1000V DC with Remote Contact							
Over-Voltage Category	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III	Cat III
String Monitoring Device								
String Monitoring Device	Yes							
Diode for The Function of Anti-Reflex	Yes							
Protocol	RS485/MODBUS-RTU							
Wireless Communication	Optional							
Monitoring Function Details	Monitoring DC voltage and current of sub-array, Monitoring the Temperature							
Power Supply	Self-Supplied DC 24V							
Inputs								
Number of DC Inputs	4	6	8	10	12	16	20	24
Connection Type DC Input	PG09,IP68(MC4 Optional)							
Input Cable Size for Negative and Positive	Ø4-8mm							
Input Fuse	10A/15A/20A/25A							
Outputs								
Number of DC Outputs	1	1	1	1	1	1	1	1
Connection Type DC Output	PG 36 ,IP68,Ø22-32mm(Be Customized)							
Gland Connectors	Material :Nylon Plastic, Seals: Nitrile Rubber Buna, IP68							
Connection DC Earth Protection	PG16,IP68,Ø10-14mm							
Environmental								
Ambient Temperature Range/Humidity	Temperature: -20 ~+60 ,Humidity: 0-99%							
Altitude	2000m 2000m Derating							
Installation	Wall mounting/ Padlockable Latch							

BYSN

Series Smart Monitoring Device

- Max.current Per Input Current:20A
- Wireless Communication (Optional)
- Alarming Indicator Light Placed Outside The Combiner Box When The Fuses Are Blown (Optional)
- 8 Channels and 12 Channels Could Be Selected
- Easy Installation and Operation;
- RS485 Communication Port
- Easily Add to Any Modbus RTU Network
- Standard Product, Same Size for 4~24 Strings;
- Low Power Dissipation;
- High Accuracy: $\pm(1\%RDG+2DGT)$

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Leading Manufacturer for
PV Solution

BYSN

Series Smart Monitoring Device

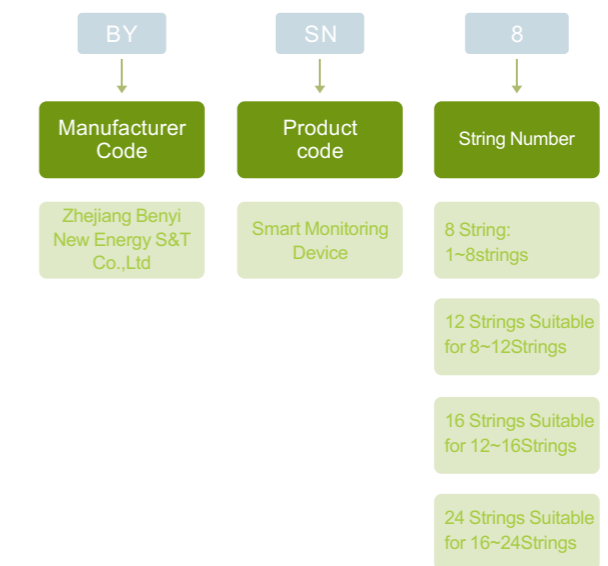


Functions

ZJ-BENY Smart monitoring device used in the photovoltaic box, the main function is :

- Measure DC current of each PV string with high accuracy;
- Measure DC voltage of sub-array with high accuracy;
- Monitor the status of DC disconnecter and SPD;
- Alarming for troubleshooting field issues;
- Remote communication through Modbus RTU network;
- Remote control interface to DC disconnecter;
- LEDs for visual verification/status;

Type Instruction



Application

The DC Current Monitor has several applications. These include:

- DC Load Monitoring
- Solar PV Power Generation
- Battery Charge and Discharge monitoring

Specifications

Power	Electrical characteristics	Mark
Power supply	24V DC, 350mA Required(not included)	
Max.Power Consumption	8W with all 24 sensors	Input Voltage 24VDC, 24 Channels
Monitoring		
Max.Number of channels	24	
Max.current per channel(A)	20A	
Current Range(A)	0.5~20	Per channel
Current Accuracy	±(1%RDG+2DGT)	
Voltage Range	100~1200	
Voltage Accuracy	±(1%RDG+3DGT)	
Output		
Alarming for Over Voltage(V)	200~1200(Adjustable)	
Alarming for Under Voltage	50~800(Adjustable)	
Alarming for Over load protection	1A~18A(Adjustable)	Default14.2A
Alarming for Reverse Current	-18A~-1A(Adjustable)	Default-2A
STATUS mONITORING for SPD	Normal or Fail	
Status monitoring for Fuse	Normal or Fail	
Status monitoring for mccb/Isolator	Normal or Trip	
Communication		
Protocols	Modbus-RTU	
Baud rate	4800bps/9600bps/19200bps(Adjustable)	Default value 9600bps
Addressing	1~247	Code Switch
Communication Distance(m)	1200m	Shielded twisted-pair cable
Wireless communication	Optional	
Environment		
Operation Ambient Temperature	-25 ~+70	
Humidity(%)	0~95%	
Storage temperature()	40 ~+85	
Altitude(M)	2500m	
Degree of Protection	Degree 2	
Physical		
Size	12 Channels 310mm x 82mm x 45mm 8 Channels 260mm x 82mm x 45mm	
Degree of Protection	IP20	
Codes and Standards		
Emissions		IEC61000(EMC)



Power Supply Specifications

Parameter	Electrical Specifications			Mark
	Min.	Typ.	Max.	
Maximum ratings				
Input Voltage(DC)	-0.3V		1000V	
Output Current			350mA	
Input Characteristics				
Operating input Voltage(DC)	100~1000VDC	100VDC	1000VDC	
Max.Input Current			120mA	Vout=24V, Full load
SPD current	10A(normal)		20A(normal)	
Output Characteristics				
Output Voltage		24V		
Output Voltage set Point	-2%		+2%	
Output Voltage Regulation	Over line	-1%	+1%	Vin=100~1000V DC
	Over Load	-2%	+2%	Io=Min to Full Load
	Over Temperature	-2%	+2%	Ta=-25 to 70
	Total output range	-2%		+2%
Output Voltage Ripple and Noise (5Hz~20MHz BANDWIDTH)	Peak-Peak		200mV	Full Load
	RMS		100mV	Full Load
Output Voltage Over-shoot at Start-up	5%	Vin=400V, Turn on		
Output Voltage Under-shoot at Power-off	100mV	Vin=400V, Turn OFF		
Short-circuit protection type	Latch			
Efficiency	80%	Vin=400V, Vout=24V, Full load		
Environment				
Operation Ambient Temperature	-25 ~+55		55 -70	Derated use (±2%)
Ventilation requirements	Naturally air cooled			
Isolation withstand voltage	4000VDC/1min			
Insulation resistance	>100m	/500VDC		
Humidity	0~95%			
Storage Temperature	-40 ~+85			
Altitude	2500m			
Code and Standards				
Emissions		IEC61000(EMC)		
Safety		UL61010-1		

Application

