

# Energy Solutions

For residential and light commercal customers

# Introduction

Our ambition is to use energy solutions from renewables to help the public and private sector achieve their net zero ambitions



# Solar Panels with 40 -540W Capacity

FOR RESIDENTIAL ANC COMMERCIAL USE

Distributed solar PV, such as rooftop solar on buildings, is also set for faster growth because of higher retail electricity prices and growing policy support.

### **Technical Capacity**

ower	40W	50W		60W	80W	100W		
Handover Rate	17.50%	18.60%	6	18.30%	19.10%	19.30%		
Size(mm)	570*400*25	670*400*	25	430*760*30	550*760*30	680*760*30		
Cell Size(mm)	182*30.3	182*36.	.4	182*45.5	182*60.6/30.3	182*76/36.4		
Cells quantity	32pcs (2*16)	32pcs (2*	32pcs (2*16) 32pcs 32pcs (4*8) (4*8) /(2*16)		32pcs ) (4*8) /(2*10 )			
Operating Voltage	18.24V	18.24	/	18.24V	18.24V	18.24V		
Working Current	2.19A	2.74A		3.29A	4.39A	5.48A		
Operating Temperature		-45°C-+85°C						
IP Grade				IP67				
Gross Weight (Kg)	2.8	3.8		4.3	5.3	6.3		
Warranty	5 years	5 years	5	5 years	5 years	5 years		
Power	120W	160W		200W	240W	300W		
Handover Rate	19.70%	20.20%		20.40%	20.70%	20.50%		
Size(mm)	800*760*30	1040*760*30	0 1	1290*760*30	1530*760*35	1290*1134*35		
Cell Size(mm)	182*91/45.5	182*121.2/60	.3 1	82*151.7/76	182*182/91	182*121.2/60.6		
Cells quanlity	32pcs (4*8) /(2*16)	32pcs (4*8) /(2*16	6)	32pcs (4*8) /(2*16)	32pcs (4*8) /(2*16)	60pcs (6*10) /(6*20)		
Operating Voltage	18.24V	18.24V		18.24V	18.24V	34.2V		
Working Current	6.58A	8.77A 10.96A		10.96A	8.77A			
Operating Temperature	-45°C-+85°C	-45°C-+85°C	-	45°C-+85°C	-45°C-+85°C	-45°C-+85°C		
IP Grade	IP67	IP67		IP67	IP67	IP67		
Gross Weight(Kg)	7.3	8.3		10.3	11.8	14.3		
Warranty	5 years	5 years		5 years	5 years	5 years		
Power	360W			400W		450W		
Handover Rate	20.60%	•	:	20.70%	2	20.80%		
Size(mm)	1540*1134	*35	172	4*1134*35	1909*1134*35			
Cell Size(mm)	182*145.	6	1	182*182	182*182			
Cells quanlity	60pcs (6*1	10) 5		ocs (6*9)	60pcs (6*10)			
Operating Voltage	34.2V	1		30.78V	34.2V			
Working Current	10.53A	3A		13A	13.16A			
Operating Temperature	-45°C-+85	5°C		°C-+85°C	-45	°C-+85°C		
IP Grade	IP67		IP67			IP67		
Gross Weight(Kg)	18.8			21.3		22.9		
Warranty	5 years			5 years	5 years			



# Energy **Storage Units** with **10KW** Capacity

FOR RESIDENTIAL ANC COMMERCIAL USE

## **Energy Storage System**



### **Technical Capacity**

8KW Hybrid Solar Power System Components List					
Item	Model	Description	Quantity		
1	Solar Panel	Mono Shingled 440W Solar Panel	20pcs		
2	Combiner Box	Optional	1 pc		
3	Lithium Battery	20Kwh	1 set 1 pc		
4	Hybrid Inverter	8kva			
5	Mounting Support	Roof/Ground	1 set		
6	Cable	4mm <sup>2</sup> PV cable	100m		
7	Connector	Solar Connector	8 pairs		
8	Tools Bag	Solar Installation tools	1 set		

#### 10KW Hybrid Solar Power System Components List

tem	Model	Description	Quantity	
1	Solar Panel	Mono Shingled 440W Solar Panel	24pcs	
2	Combiner Box	Optional	1 pc	
3	Lithium Battery	30Kwh	1 set	
4	Hybrid Inverter	10kva	1 pc	
5	Mounting Support	Roof/Ground	1 set	
6	Cable	4mm <sup>2</sup> PV cable	100m	
7	Connector	Solar Connector	12 pairs	
8	Tools Bag	Solar Installation tools	1 set	

#### 12KW Hybrid Solar Power System Components List Item Model Description Quantity Solar Panel Mono Shingled 440W Solar Panel 1 28pcs 2 Combiner Box Optional 1 pc 3 Lithium Battery 40Kwh 1 set 4 Hybrid Inverter 12kva 1 pc 5 Mounting Support Roof/Ground 1 set 6 Cable 4mm<sup>2</sup> PV cable 200m 7 Connector Solar Connector 16 pairs 8 Tools Bag Solar Installation tools 1 set

15KW Hybrid Solar Power System Components List					
tem	Model	Description	Quantity 36pcs		
1	Solar Panel	Mono Shingled 440W Solar Panel			
2	Combiner Box	Optional	1 pc		
3	Lithium Battery	50Kwh	1 set		
4	Hybrid Inverter	15kva	1 pc		
5	Mounting Support	Roof/Ground	1 set		
6	Cable	4mm <sup>2</sup> PV cable	200m		
7	Connector	Solar Connector	20 pairs		
8	Tools Bag	Solar Installation tools	1 set		



# EV Chargers with 40-80 KW capacity

FOR RESIDENTIAL ANC COMMERCIAL USE



# **Technical Capacity**

Models	BDC-S40	BDC-S60	BDC-S80		
Connectors		CCS2			
Number of plugs		1			
DC output power	40KW 60KW 80KW				
AC input voltage		AC380V±15%			
AC input frequency		45-65Hz			
DC output voltage range	DC50-750V	DC50-1000V	DC50-750V		
DC output current	single connector 100A/ double connector 50A				
Cable length		Standard 5m(customi	zable)		
Efficiency		≥95%			
Noise emission		s65dB			
IP Rating		IP54			
Warranty	12 Months				
Enclosure Protection		IK10			
Standard	IEC/EN 618	151, IEC/EN 62196. ISO	15118, DIN 70121		
Communication		OCPP 1.6J			
Protocol		0017 1.00			
Status indication		15 inch LCD screen/LE	Dlight		
Connectivity		RFID/NFC, App, V	N		
Authorization					
Network connection		4G/Ethernet			
Electrical protections	Under voltage, Over voltage, Short circuit, Over current, Leakage Protection, Over temperature, Emergency stop, Surge protection, Insulation detection				
Cooling method		Air cooling			
Operating		-25°C~+55°C			
temperature					
Storage temperature		-40°C~+80°C			
Operating humidity		5%-90% non-conder	nsing		
Maximum installation height		2000m			
Dimension (W x H x D)		450 × 760 × 235m	m		
Models	BDC-S120	BDC-S160	BDC-S240		
Connectors		CCS2			
Number of plugs		1			
DC output power	120KW	160KW	240KW		
AC input voltage		AC380V#15%			
AC input frequency	45-65Hz				
DC output voltage range		DC50-1000V			
DC output current	single connector 200A/ double connector 200A				
Cable length		Standard 5m(customia	zable)		
Efficiency		≥95%			
Noise emission		s65dB			
IP Rating		IP54			
Warranty		12 Months			
Enclosure Protection		IK10			
Standard	IEC/EN 61	351, IEC/EN 62196, ISO	15118, DIN 70121		
Communication Protocol		OCPP 1.6J			
Status indication		15 inch LCD screen/LE	D light		
Connectivity Authorization		RFID/NFC, App, VI	N		
Network connection		4G/Ethernet			
Electrical protections	Under voltage, Over vol Over temperature, Em	tage, Short circuit, Ove ergency stop , Surge p	r current, Leakage Protection, rotection, Insulation detection		
Cooling method		Air cooling			
Operating temperature		-25°C~+55°C			
Storage temperature		-40°C~+80°C			
Operating humidity		5%-90% non-conden	sing		
Maximum installation		2000m			
height					



# Wind Turbines up to 100KW capacity

WIND POWER OF RESIDENTIAL AND COMMERCIAL CUSTOMERS.

# **Technical Capacity**

Model	L1000	L1500	L2000	L3000	G5000	G7500	G10K	
Rated power	1kw	1.5kw	2kw	3kw	5kw	7.5kw	10kw	
Rated voltage	48V/96V/120V/220V/240V			120V/220V/240V/380V				
Start-up wind speed	2m/s					w 7.5kw 10k 120V/220V/240V/380V 2.5m/s m 5.8m 6.5d forced die-cast aluminum+ster hronous generator		
Rated wind speed				11m/s				
Safe wind speed				≤50m/s	;			
Blade diameter	2.6m	2.8m	3.1/3.2 m	4.1m	5.4m	5.8m	6.5m	
Blade number				3 pcs				
Blade material	Reinforced FRP							
Fuselage material	Reinforced die-cast aluminum Reinforced die-cast aluminum+ster				inum+steel			
Magnetic steel material	NdFeB							
Generator type		Three-phase AC permanent magnet synchronous generator						
Control mode	Electromagnetic brakes							
Wind direction adjustment	Automatically adjusts the windward angle							
Service life				≥ 20 yea	rs			
Protection grade				IP54				
Net weight	48kg	53kg	58kg	95kg	285kg	295kg	215kg	
Gross weight	52kg	57kg	62kg	110kg	315kg	325kg	245kg	
Packing size (cm)	67*48* 26+130 *27*27	67*48* 26+147 *27*27	67*48* 26+162 *27*27	75*37*37+ 200*23*3 2 +74*52*5	90*52*45 + 300*42*4 4 +116*87*5	95*55*61+ 285*33*3 7 +94*42*2 8	90*52*4 + 230*30* 8 +48*48* 0	