



General Products Catalogue

2023-4

Follow the sun



General Products Catalogue 2023-4

The information contained in this catalog is always the latest version of the technical specifications of the products. However, in order to improve the quality and specifications of the products, Niak Energy Company has the right to make changes in the product without prior notice or after the latest revision.

About us

Niak Energy Golsar company is one of the subsidiaries of Golnoor Sadra holding company founded in September 2021.

With the aim of establishing a new perspective in the field of renewable energies, this company has started its activity by relying on technical knowledge and experience of fifteen years to develop and focus on this field.

Field of activities

- Consultation, design, and feasibility of all types of solar power plants, on-grid, off-grid, hybrid (combined energy systems), and solar lighting.
- Production of on-grid solar inverters, information monitoring systems for solar power plants, and portable solar systems.
- Supplying all kinds of equipment related to photovoltaic power plants, one of the world's well-known brands, and their specialized repairs.
- Holding specialized educational seminars in the field of renewable energy

Niak Energy company, in addition to carrying out its activities in technical engineering, research development, and culture-building in the use of photovoltaic systems, has always tried to select the most reliable brands of products for the implementation of its projects.

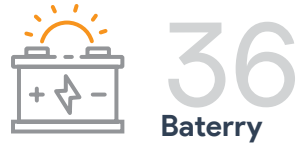
In this regard, it has extensive cooperation with reputable producers in supplying photovoltaic equipment, including solar panels, batteries, charge controllers, and solar inverters (on-grid, off-grid). Moreover, it is working as a representative or distributor.

The brands that Niak Energy cooperates with in supplying its equipment are:





01
Solar Panel



36
Battery



13
On grid Inverter



41
Portable solar system



21
Off grid Inverter



43
Accessories



28
charge controller



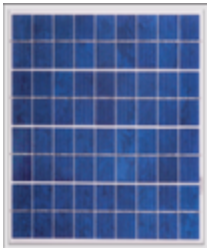
50
DC Luminaire

Abbreviated symbols

	Positive power tolerance		Minimal water loss		Fan ventilation
	Half-Cut technology		deep cycle		LED light source
	PERC technology		Solar inverter		Long life
	Multi bass bar		single phase		Modular
	Mechanical stress tolerance		Three-phase		spotlight
	Polycrystalline cell		Wi-Fi module		street
	Monocrystalline cell		Bluetooth		Fast installation
	Bifacial		sound level		Symmetrical light distribution
	Lithium ion battery		wall installation		Asymmetric light distribution
	Lead acid battery		Protection class one		pulse width modulation (PWM)
	Gel electrolyte		No fan		Maximum Power Point Tracking (MPPT)
	Pure sine wave		Infrared (IR)		Operating temperature range
	Low self-discharge		Connecting the cable from the bottom		High frequency pure sine wave
	USB port		Battery charging with city power adapter		LED indicator
	fast charge		Battery charging with solar panel		LCD screen
	Programmable		DC Output		Degree of protection against impact of hard objects (IK)
	Modbus communication protocol with RS485 cable		Adjustable structure		IP degree of protection
	Remote control with RJ45 cable		Installation without tools		

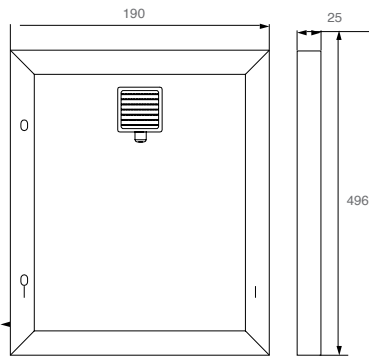


Solar Panel



Polycrystal Solar Panel 10 W

Code:270301030



Electrical Specifications (in standard test conditions)

STC (Irradiance:1000W/m², Cell temperature: 25°C, AM:1.5g)

Parameter	JS 10
Max. Power (W)	10
Power output tolerances(W)	±5
Efficiency (%)	10.6
Voltage at Pmax	18.4
Current at Pmax	0.54
Open circuit voltage(V)	22.5
Short circuit current(A)	0.57
Fill factor	0.77
Number of cells	36

Temperature characteristics (in test conditions (NOCT))

NOCT (Irradiance:800W/m², ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)

Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06

Mechanical specifications

Dimensions(mm)	496×190×25
Weight (Kg)	1.5

Packaging specifications

Dimensions(mm)	511×205×285
Quantity per package(pcs)	10

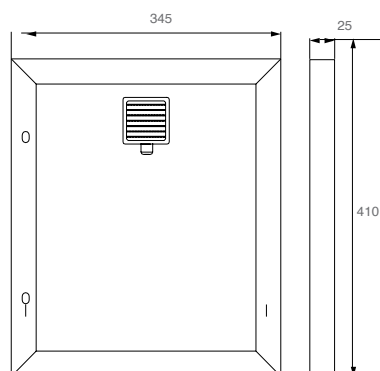
General specifications

Operational temperature(°C)	-40~+85
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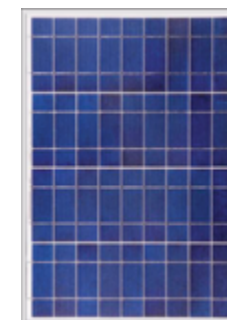


Polycrystal Solar Panel 20 W

Code:270301033

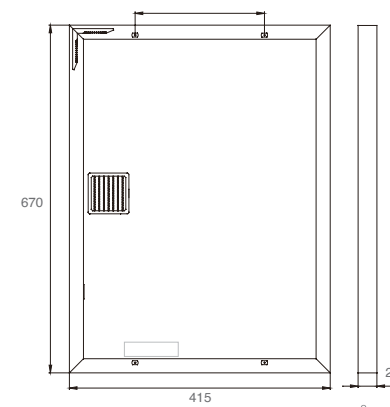


Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m2, Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 20
Max. Power (W)	20
Power output tolerances(W)	±5
Efficiency (%)	14.1
Voltage at Pmax	18.3
Current at Pmax	1.09
Open circuit voltage(V)	22.3
Short circuit current(A)	1.15
Fill factor	0.77
Number of cells	36
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m2, ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	410*345*25
Weight (Kg)	2.0
Packaging specifications	
Dimensions(mm)	425*360*285
Quantity per package(pcs)	10
General specifications	
Operational temperature(°C)	-40~+85

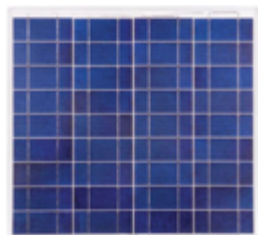


Polycrystal Solar Panel 40 W

Code:270301037

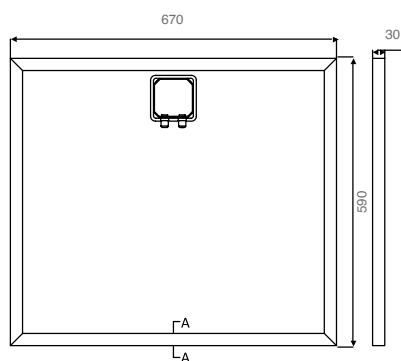


Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m2, Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 40
Max. Power (W)	40
Power output tolerances(W)	±5
Efficiency (%)	14.4
Voltage at Pmax	18.3
Current at Pmax	2.19
Open circuit voltage(V)	22.7
Short circuit current(A)	2.31
Fill factor	0.76
Number of cells	36
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m2, ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	670*415*25
Weight (Kg)	3.2
Packaging specifications	
Dimensions(mm)	430*685*175
Quantity per package(pcs)	6
General specifications	
Operational temperature(°C)	-40~+85



Polycrystal Solar Panel 60 W

Code:270301038

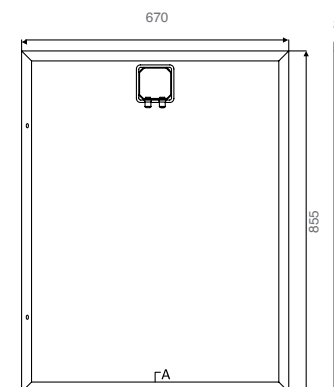


Electrical Specifications (in standard test conditions)	
STC (Irradiance:1000W/m2, Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 60
Max. Power (W)	60
Power output tolerances(W)	±5
Efficiency (%)	15.2
Voltage at Pmax	18.4
Current at Pmax	3.26
Open circuit voltage(V)	22.4
Short circuit current(A)	3.44
Fill factor	0.77
Number of cells	36
Temperature characteristics (in test conditions (NOCT))	
NOCT (Irradiance:800W/m2, ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	670*590*30
Weight (Kg)	4.6
Packaging specifications	
Dimensions(mm)	685*605*205
Quantity per package(pcs)	6
General specifications	
Operational temperature(°C)	-40~+85

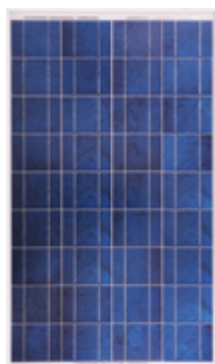


Polycrystal Solar Panel 90 W

Code:270301040

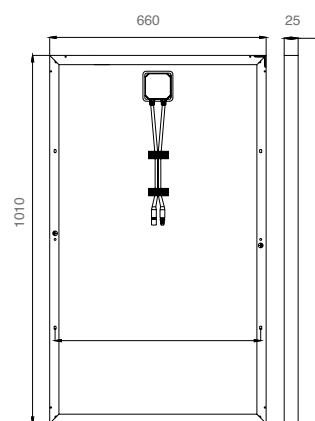


Electrical Specifications (in standard test conditions)	
STC (Irradiance:1000W/m2, Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 90
Max. Power (W)	90
Power output tolerances(W)	±5
Efficiency (%)	15.7
Voltage at Pmax	18.9
Current at Pmax	4.75
Open circuit voltage(V)	23.0
Short circuit current(A)	5.13
Fill factor	0.76
Number of cells	36
Temperature characteristics (in test conditions (NOCT))	
NOCT (Irradiance:800W/m2, ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	855*670*30
Weight (Kg)	6.7
Packaging specifications	
Dimensions(mm)	870*685*205
Quantity per package(pcs)	6
General specifications	
Operational temperature(°C)	-40~+85

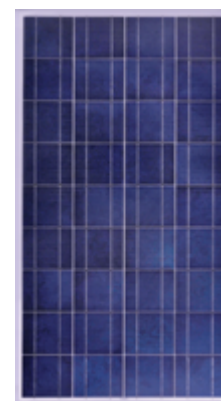


Polycrystal Solar Panel 100 W

Code:270301058

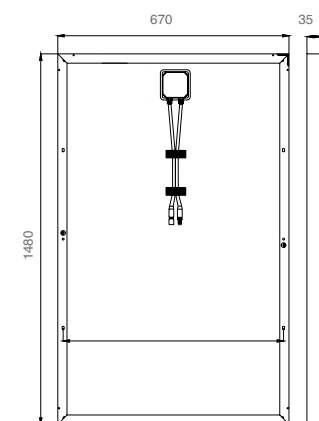


Electrical Specifications (in standard test conditions)	
STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 100
Max. Power (W)	100
Power output tolerances(W)	±5
Efficiency (%)	15.0
Voltage at Pmax	18.5
Current at Pmax	5.41
Open circuit voltage(V)	22.9
Short circuit current(A)	5.74
Fill factor	0.76
Number of cells	36
Temperature characteristics (in test conditions (NOCT))	
NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	1010*660*25
Weight (Kg)	7.7
Packaging specifications	
Dimensions(mm)	1025*675*175
Quantity per package(pcs)	6
General specifications	
Operational temperature(°C)	-40~+85

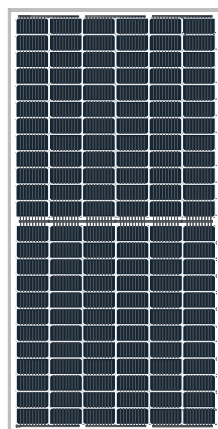


Polycrystal Solar Panel 150 W

Code:270301031

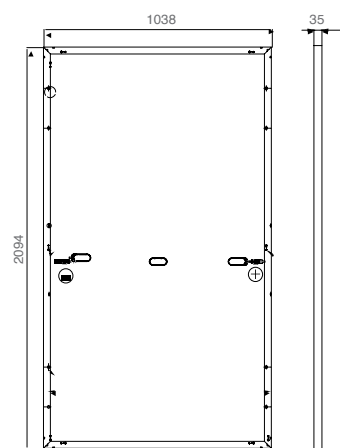


Electrical Specifications (in standard test conditions)	
STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	JS 150
Max. Power (W)	150
Power output tolerances(W)	±5
Efficiency (%)	15.1
Voltage at Pmax	18.5
Current at Pmax	8.12
Open circuit voltage(V)	22.9
Short circuit current(A)	8.61
Fill factor	0.76
Number of cells	36
Temperature characteristics (in test conditions (NOCT))	
NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	46±2
Temperature coefficient of Pmax (%/°C)	-0.45
Temperature coefficient of VOC(%/°C)	-0.37
Temperature coefficient of ISC(%/°C)	0.06
Mechanical specifications	
Dimensions(mm)	1480*670*35
Weight (Kg)	10.8
Packaging specifications	
Dimensions(mm)	1495*685*90
Quantity per package(pcs)	2
General specifications	
Operational temperature(°C)	-40~+85



Monocrystal Solar Panel 455W

Code:270301060

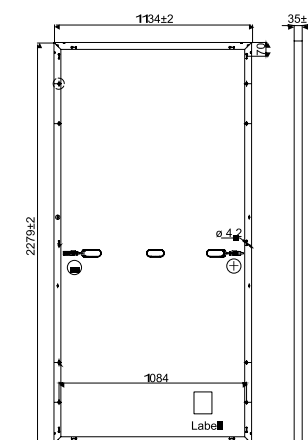


Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	LR4-72HPH-455M
Max. Power (W)	455
Power output tolerances(W)	0~+5
Efficiency (%)	20.9
Voltage at Pmax	41.7
Current at Pmax	10.92
Open circuit voltage(V)	49.5
Short circuit current(A)	11.66
Fill factor	0.788
Number of cells	144(6*24)
Technologies	PERC/ Half-cell
Number of Busbar	11
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	45±2
Temperature coefficient of Pmax (%/°C)	-0.35
Temperature coefficient of VOC(%/°C)	-0.270
Temperature coefficient of ISC(%/°C)	0.048
Mechanical specifications	
Dimensions(mm)	2094*1038*35
Weight (Kg)	23.5
Packaging specifications	
Quantity per package(pcs)	30
General specifications	
Operational temperature(°C)	-40~+85
Ingress protection	IP68
Guarantee(years)	12



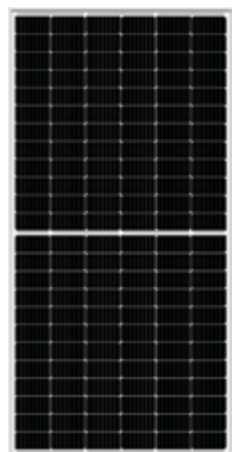
Monocrystal Solar Panel 540 W

Code:270301059



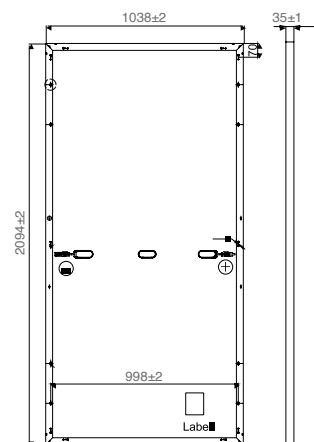
Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	JAM72S30-540/MR
Max. Power (W)	540
Power output tolerances(W)	0~+5
Efficiency (%)	20.9
Voltage at Pmax	41.64
Current at Pmax	12.97
Open circuit voltage(V)	49.60
Short circuit current(A)	13.86
Fill factor	0.785
Number of cells	144(6*24)
Technologies	PERC/ Half-cell
Number of Busbar (pcs)	11
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	45±2
Temperature coefficient of Pmax (%/°C)	-0.350
Temperature coefficient of VOC(%/°C)	-0.275
Temperature coefficient of ISC(%/°C)	+0.045
Mechanical specifications	
Dimensions(mm)	2279±2*1134±2*35±1
Weight (Kg)	28.6±3%
Packaging specifications	
Quantity per package(pcs)	31
General specifications	
Operational temperature(°C)	-40~+85
Ingress protection	IP68
Guarantee(years)	12





Monocrystal Solar Panel 455 W

Code:270301061

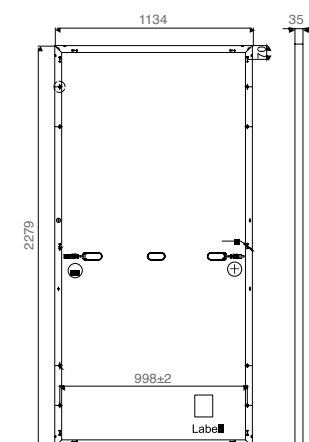


Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	UL-455M-144HV
Max. Power (W)	455
Power output tolerances(W)	0~+5
Efficiency(%)	20.93
Voltage at Pmax	41.1
Current at Pmax	11.07
Open circuit voltage(V)	49.9
Short circuit current(A)	11.64
Fill factor	0.79
Number of cells	144(6*24)
Technologies	PERC/ Half-cell
Number of Busbar (pcs)	9BB
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	43±2
Temperature coefficient of Pmax (%/°C)	-0.360
Temperature coefficient of VOC(%/°C)	-0.330
Temperature coefficient of ISC(%/°C)	0.049
Mechanical specifications	
Dimensions(mm)	2094±2*1038±2*35
Weight (Kg)	24
Packaging specifications	
Dimensions(mm)	2134*1120*2490
Quantity per package(pcs)	65
General specifications	
Operational temperature(°C)	-40~+85
Ingress protection	IP68



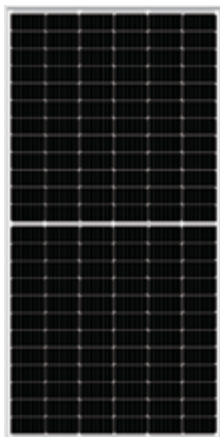
Monocrystal Solar Panel 550 W

Code:270301062



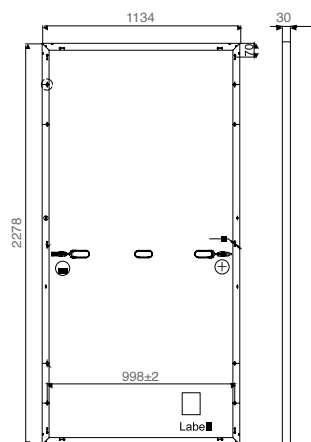
Electrical Specifications (in standard test conditions) STC (Irradiance:1000W/m ² , Cell temperature: 25°C, AM:1.5g)	
Parameter	UL-550M-144HV
Max. Power (W)	550
Power output tolerances(W)	0~+5
Efficiency(%)	21.28
Voltage at Pmax	41.9
Current at Pmax	13.13
Open circuit voltage(V)	50
Short circuit current(A)	13.75
Fill factor	0.8
Number of cells	144(6*24)
Technologies	PERC/ Half-cell
Number of Busbar (pcs)	10BB
Temperature characteristics (in test conditions (NOCT)) NOCT (Irradiance:800W/m ² , ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	45±2
Temperature coefficient of Pmax (%/°C)	-0.36
Temperature coefficient of VOC(%/°C)	-0.290
Temperature coefficient of ISC(%/°C)	+0.049
Mechanical specifications	
Dimensions(mm)	2279*1134*35
Weight (Kg)	28.3
Packaging specifications	
Dimensions(mm)	2325*1120*2550
Quantity per package(pcs)	62
General specifications	
Operational temperature(°C)	-40~+85





Monocrystal Solar Panel 550 W

Code:670601001



Electrical Specifications (in standard test conditions)	
STC (Irradiance:1000W/m2, Cell temperature: 25°C, AM:1.5g)	
Parameter	JKM550M-72HL4-BDVP
Max. Power (W)	550
Power output tolerances(W)	0~+3
Efficiency(%)	21.29
Voltage at Pmax	41.51
Current at Pmax	13.25
Open circuit voltage(V)	50.11
Short circuit current(A)	14.01
Fill factor	0.77
Number of cells	144(6*24)
Technologies	Bifacial/MBB/Half Cut
Temperature characteristics (in test conditions (NOCT))	
NOCT (Irradiance:800W/m2, ambient temperature: 20°C, Wind speed:1m/s, AM:1.5g)	
Nominal operating cell temperature(°C)	45±2
Temperature coefficient of Pmax (%/°C)	-0.35
Temperature coefficient of VOC(%/°C)	-0.28
Temperature coefficient of ISC(%/°C)	0.048
Mechanical specifications	
Dimensions(mm)	2278*1134*30
Weight (Kg)	32
Packaging specifications	
Dimensions(mm)	2325*1120*2550
Quantity per package(pcs)	72
General specifications	
Operational temperature(°C)	-40~+85
Ingress protection	IP68
Guarantee(years)	12



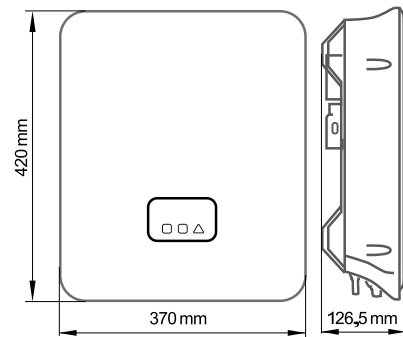
On grid Inverter



Solar Inverter 3 , 5KW Single Phase

Code3KW: 270502093

Code5KW: 270502087



Model	GS-3000-S	GS-5000-S
INPUT (DC)		
Max. input power(W)	3900	6500
Max. input voltage(V)	600	
Start-up voltage(V)	120	
Rated input voltage(V)	360	
MPPT voltage range(V)	90 - 550	
MPPT voltage range at full load(V)	120 - 480	190 - 480
Max. input current (A)	15A×2	
Max. short circuit current	20A×2	
Number of MPPTs	2	
OUTPUT (AC)		
Rated output power (KW)	3	5
Max. output current (A)	13	21.8
Rated grid voltage(Vac)	230	
Grid voltage range (Vac)	180-280	
Rated grid frequency(Hz)	50 / 60	
Grid frequency range(Hz)	45 - 55 / 55 - 65	
THD (%)	< 3	
Power factor	> 0.99	
Power factor adjustable	0.8 leading ~ 0.8 lagging	
Efficiency		
Max. efficiency(%)	97.8	
European efficiency (%)	97.3	
Mechanical specifications		
Dimensions(mm)	370×126.5×420	
Weight(Kg)	10.9	

General information		
Operating temperature(°C)	-25 ~ +60	
Altitude(%)	0~100	
IP rating	IP65	
Other		
Protections	DC reverse polarity protection, Dc input impedance monitoring, Leakage current protection, Output short-circuit protection, Anti-Islanding protection, Output Dc component detection, Ground insulation resistance detection, Output overcurrent protection, Output overvoltage protection, Dc surge protection, Ac surge protection	
Protective class	I	
overvoltage category	II(DC) / III(AC)	
Communication protocol	RS485	●
	Wi-Fi	○
	Bluetooth	○
	GPRS	○
Communication device	Internal Wi-Fi module	○
	External Wi-Fi module	○
	Arkabin monitoring system	○
Display	LED	
Self-consumption at night	<0.5W	
Cooling	Natural cooling	
Installation method	Wall-mounted	
Body Material	Die Casting-Aluminum	
Isolation	Transformerless	
according to standards	IEC/EN 62116, IEC61727,VDE V 0126-1-1, IEC/EN 62109-1, IEC/EN 62109-2, EN61000-6-1, EN 61000-6-2, EN61000-6-3, EN61000-6-4	
DC wiring terminal	MC4	
AC wiring terminal	Plug and play	
Altitude(m)	4000m	
Noise	<40db	

● Standard feature ○ Optional feature



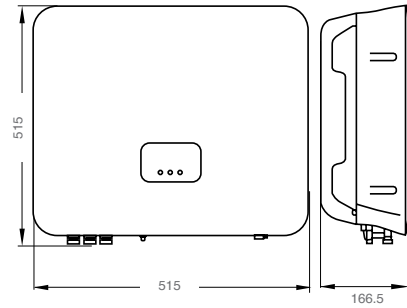


Solar Inverter 5,10,16KW Three Phase

Code5KW: 270502088

Code10KW: 270502089

Code16KW: 270502090



Model	GS-3000-S	GS-5000-S
INPUT (DC)		
Max. input power(W)	3900	6500
Max. input voltage(V)	600	
Start-up voltage(V)	120	
Rated input voltage(V)	360	
MPPT voltage range(V)	90 - 550	
MPPT voltage range at full load(V)	120 - 480	190 - 480
Max. input current (A)	15A×2	
Max. short circuit current	20A×2	
Number of MPPTs	2	
OUTPUT (AC)		
Rated output power (KW)	3	5
Max. output current (A)	13	21.8
Rated grid voltage(Vac)	230	
Grid voltage range (Vac)	180-280	
Rated grid frequency(Hz)	50 / 60	
Grid frequency range(Hz)	45 - 55 / 55 - 65	
THD (%)	< 3	
Power factor	> 0.99	
Power factor adjustable	0.8 leading ~ 0.8 lagging	
Efficiency		
Max. efficiency(%)	97.8	
European efficiency (%)	97.3	
Mechanical specifications		
Dimensions(mm)	370×126.5×420	
Weight(Kg)	10.9	

General information		
Operating temperature(°C)	-25 ~ +60	
Altitude(%)	0~100	
IP rating	IP65	
Other		
Protections	DC reverse polarity protection, Dc input impedance monitoring, Leakage current protection, Output short-circuit protection, Anti-islanding protection, Output Dc component detection, Ground insulation resistance detection, Output overcurrent protection, Output overvoltage protection, Dc surge protection, Ac surge protection	
Protective class	I	
overvoltage category	II(DC) / III(AC)	
Communication protocol	RS485	●
	Wi-Fi	○
	Bluetooth	○
	GPRS	○
Communication device	Internal Wi-Fi module	○
	External Wi-Fi module	○
	Arkabin monitoring system	○
Display	LED	
Self-consumption at night	<0.5W	
Cooling	Natural cooling	
Installation method	Wall-mounted	
Body Material	Die Casting-Aluminum	
Isolation	Transformerless	
according to standards	IEC/EN 62116, IEC61727,VDE V 0126-1-1, IEC/EN 62109-1, IEC/EN 62109-2, EN61000-6-1, EN 61000-6-2, EN61000-6-3, EN61000-6-4	
DC wiring terminal	MC4	
AC wiring terminal	Plug and play	
Altitude(m)	4000m	
Noise	<40db	

● Standard feature ○ Optional feature

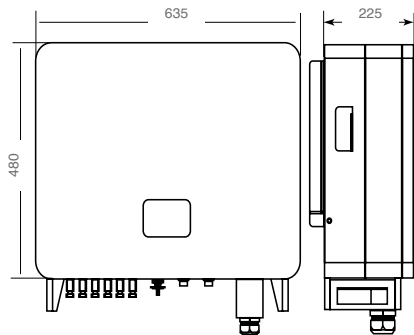




Solar Inverter 20,25KW / Three Phase

Code20KW: 270502091

Code25KW: 270502092



Model	GS-20000-T	GS-25000-T
INPUT (DC)		
Max. input power(W)	26000	32500
Max. input voltage(V)	1100	
Start-up voltage(V)	250	
MPPT voltage range(V)	200 - 950	
MPPT voltage range at full load	470-850	
Max. input current (A)	14×2A/14×2A	14×3A/14×2A
Max. short circuit current(A)	20×2A/20×2A	20×3A/20×2A
Number of MPPTs	2	
Max. input string	A:2/B:2	A:3/B:2
OUTPUT (AC)		
Rated output power (KW)	20	25
Max. active power (KW)	20	25
Max. apparent power (KVA)	20	25
Max. output current (A)	29	36.3
Rated grid voltage	230V/400V,3W+N+PE	
Grid voltage range (Vac)	176-276 / 304-480	
Rated grid frequency(Hz)	50 / 60	
Grid frequency range(Hz)	45 - 55 / 55 - 65	
THD (%)	< 3	
Power factor	> 0.99	
Power factor adjustable	0.8 leading~ 0.8 lagging	
Efficiency		
Max. efficiency(%)	98.9	
European efficiency (%)	98.5	
Mechanical specifications		
Dimensions(mm)	635×225×480	
Weight(Kg)	43	

General information		
Operating temperature(°C)	-25 ~ +60	
Altitude(%)	0~100	
IP rating	IP65	
Other		
Protections	DC reverse polarity protection, Dc input impedance monitoring, Leakage current protection, Output short-circuit protection, Anti-Islanding protection, Output Dc component detection, Ground insulation resistance detection, Output overcurrent protection, Output overvoltage protection, Dc surge protection, Ac surge protection	
Protective class	I	
overvoltage category	II(DC) / III(AC)	
Communication protocol	RS485	●
	Wi-Fi	○
	Bluetooth	○
	GPRS	○
Communication device	Internal Wi-Fi module	○
	External Wi-Fi module	○
	Arkabin monitoring system	○
Display	LED	
Self-consumption at night	<1W	
Cooling	Natural cooling	
Installation method	Wall-mounted	
Body Material	Die Casting-Aluminum	
Isolation	Transformerless	
according to standards	IEC/EN 62116, IEC61727,VDE V 0126-1-1, IEC/EN 62109-1, IEC/EN 62109-2, EN61000-6-1, EN 61000-6-2, EN61000-6-3, EN61000-6-4	
Altitude(m)	2000	

● Standard feature ○ Optional feature



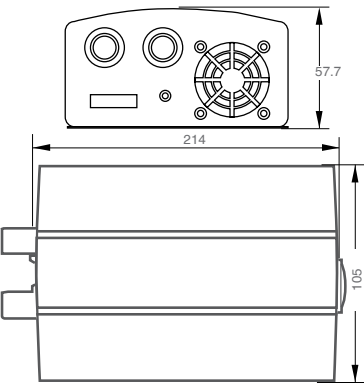


Off grid Inverter



Solar Inverter IPower 350 W

Code: 270502025



Electrical Specifications	
Parameter	IP350-12
Continuous output power(W)	280
Output power 15 min. (W)	350
Surge power(W)	750
Output voltage	220VAC (±5%) 230VAC (-7%~+5%)
Output frequency	50/60 Hz ±0.1%
Output wave	Pure sine wave
Output distortion THD	THD≤3%
Load power factor	0.2-1(Load VA≤ Continuous output power)
Rated input voltage (VDC)	12
Input voltage range (VDC)	10.8~16
Input surge voltage (VDC)	<32
Max. output efficiency (%)	91
No-load current(A)	<0.7
USB output	5VDC/MAX.1A
RS485 com. port	-
Mechanical specifications	
Dimension (mm)	214*105.5*57.7
Mounting dimension(mm)	185.5×76.7
Weight (Kg)	1
General Specifications	
Operating temperature range(°C)	-20 ~+45
Relative humidity (%)	<95%
Ingress Protection (IP)	IP20

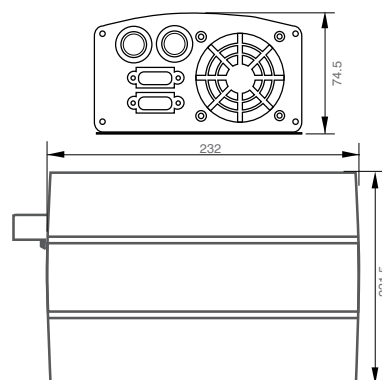




Solar Inverter IPower 500W

Code IP500/12V: 270502026

Code IP500/24V: 270502023

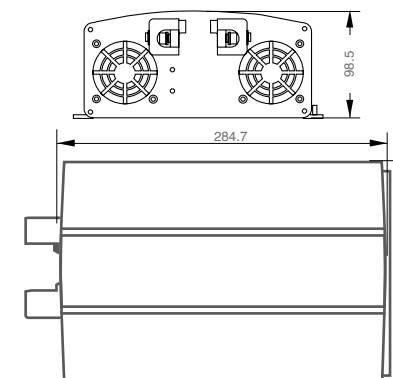


Electrical Specifications		
Parameter	IP500-12	IP500-24
Continuous output power(W)	400	
Output power 15 min. (W)	500	
Surge power(W)	1000	
Output voltage	220VAC (±5%) 230VAC (-10%~+5%)	
Output frequency	50/60 Hz ±0.1%	
Output wave	Pure sine wave	
Output distortion THD	THD≤3%	
Load power factor	0.2-1(Load VA≤ Continuous output power)	
Rated input voltage (VDC)	12	24
Input voltage range (VDC)	10.8~16	21.6~32
Input surge voltage (VDC)	<32	<44
Max. output efficiency (%)	92	
No-load current(A)	<0.9	<0.5
USB output	5VDC/MAX.1A	
RS485 com. port	-	
Mechanical specifications		
Dimension (mm)	232*132*74.5	
Mounting dimension(mm)	205*102	
Weight (Kg)	1.7	
General Specifications		
Operating temperature range(°C)	-20 ~+45	
Relative humidity (%)	<95%	
Ingress Protection (IP)	IP20	



Solar Inverter IPower 1000W

Code: 270502019



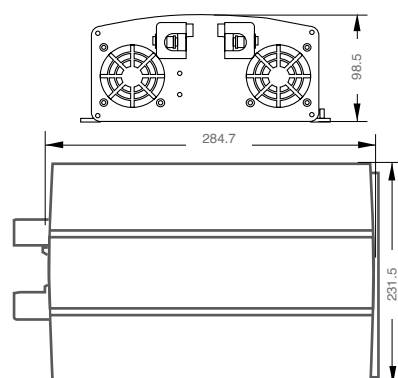
Electrical Specifications	
Parameter	IP1000-22
Continuous output power(W)	800
Output power 15 min. (W)	1000
Surge power(W)	1600
Output voltage	220VAC 230VAC (±5%)
Output frequency	50/60 Hz ±0.1%
Output wave	Pure sine wave
Output distortion THD	THD≤3%
Load power factor	0.2-1(Load VA≤ Continuous output power)
Rated input voltage (VDC)	24
Input voltage range (VDC)	21.6~32
Input surge voltage (VDC)	<40
Max. output efficiency (%)	94.50
No-load current(A)	<0.5
USB output	5VDC/Max.1A
RS485 com. port	5VDC/200mA
Mechanical specifications	
Dimension (mm)	284.7*231.5*98.5
Mounting dimension(mm)	163*219.5
Weight (Kg)	3.6
General Specifications	
Operating temperature range(°C)	-20 ~+45
Relative humidity (%)	<95%
Ingress Protection (IP)	IP20





Solar Inverter IPower 1500W

Code: 270502020



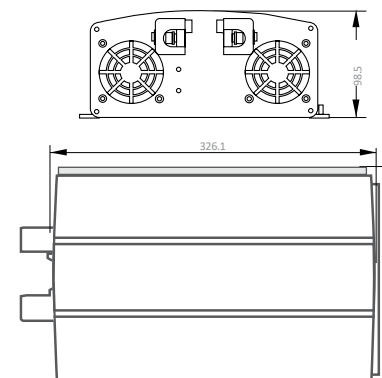
Electrical Specifications	
Parameter	IP1500-22
Continuous output power(W)	1200
Output power 15 min. (W)	1500
Surge power(W)	2400
Output voltage	220VAC (±5%) 230VAC (-7%~ +5%)
Output frequency	50/60 Hz ±0.1%
Output wave	Pure sine wave
Output distortion THD	THD≤3%
Load power factor	0.2-1(Load VA≤ Continuous output power)
Rated input voltage (VDC)	24
Input voltage range (VDC)	21.6~32
Input surge voltage (VDC)	<40
Max. output efficiency (%)	94
No-load current(A)	<0.6
USB output	5VDC/Max.1A
RS485 com. port	5VDC/200mA
Mechanical specifications	
Dimension (mm)	284.7*231.5*98.5
Mounting dimension(mm)	163*219.5
Weight (Kg)	3.9
General Specifications	
Operating temperature range(°C)	-20 ~+45
Relative humidity (%)	<95%
Ingress Protection (IP)	IP20



Solar Inverter IPower 2000W

Code: IP2000/24V:270502021

Code: IP2000/48V:270502024



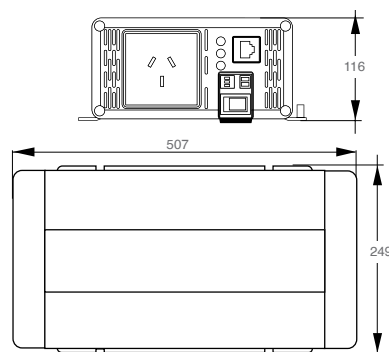
Electrical Specifications		
Parameter	IP2000-22	IP2000-42
Continuous output power(W)	1600	1600
Output power 15 min. (W)	2000	2000
Surge power(W)	3200	3200
Output voltage	220VAC(±5%), 230VAC(-10%~+5%)	
Output frequency	50/60 Hz ±0.1%	
Output wave	Pure sine wave	
Output distortion THD	THD≤3%	
Load power factor	0.2-1	
Rated input voltage (VDC)	24	48
Input voltage range (VDC)	21.6~32	43.2~60
Input surge voltage (VDC)	<40	<80
Max. output efficiency (%)	95%	95%
No-load current(A)	<0.6	<0.4
USB output	5VDC/Max.1A	
RS485 com. port	5VDC/200mA	
Mechanical specifications		
Dimension (mm)	326.1×231.5×98.5	
Weight (Kg)	4.6	
General Specifications		
Operating temperature range(°C)	-20 ~+45	
Relative humidity (%)	<95%	
Ingress Protection (IP)	IP20	





Solar Inverter Shi 3000 W

Code: 270501023

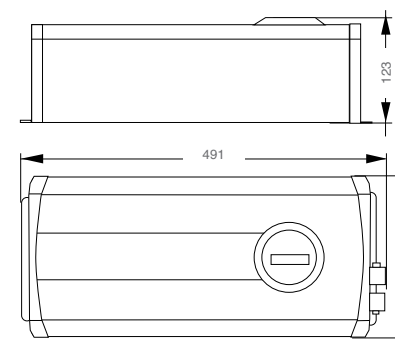


Electrical Specifications	
Parameter	SHI 3000-22
Rated battery voltage	24
Input voltage range (VDC)	21.6~32
No-load current(A)	≤1.2
Output wave	Pure sine wave
Output voltage	220VAC (±3%)
Continuous output power(W)	230VAC (±10%)
Surge power(W)	3000
Output frequency	6900
Output distortion THD	50/60 Hz ±0.1%
Efficiency at Rated Power	THD≤3%
Max. Efficiency	≥ 93%
Mechanical specifications	
Dimension (mm)	507×249×116
Mounting dimension(mm)	-
Weight (Kg)	7.5
General Specifications	
Operating temperature range(°C)	-20 ~+50
Relative humidity (%)	<95%
Ingress Protection (IP)	IP20



Solar Inverter IP/Plus 3000W

Code: 270501025



Electrical Specifications		
Parameter	IP3000-22-Plus	IP3000-42-Plus
Continuous output power(W)	3000	
Surge power	6000W@5S	
Surge current when power on(A)	<100	<65
Output voltage	220VAC (±5%) 230VAC (-7%~+5%)	
Output frequency	50/60 Hz ±0.1%	
Output wave	Pure sine wave	
Output distortion THD	THD≤3%	
Load power factor	0.2-1(Load VA≤ Continuous output power)	
Rated input voltage (VDC)	24	48
Input voltage range (VDC)	21.6~32	43.2~64
Rated output efficiency(%)	>87	89.5
Max. output efficiency	>91.5(%)	93.5(30% loads)
No-load current(A)	<1A	
USB output	5 VDC/Max.1A	
RS485 com. port	5VDC/200mA	
Mechanical specifications		
Dimension (mm)	521*274*148	516*231.5*123
Mounting dimension(mm)	495*145	490*145
Weight (Kg)	8	
General Specifications		
Operating temperature range(°C)	-20 ~+60	
Relative humidity (%)	<95%	
Ingress Protection (IP)	IP20	



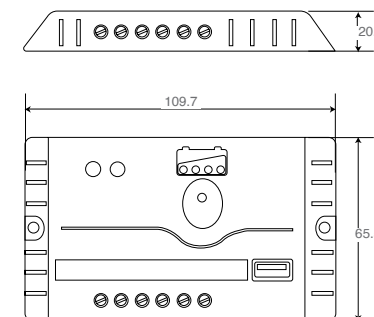


Charge Controller



Charge Controller Ls Eu - 5A

Code:270401012



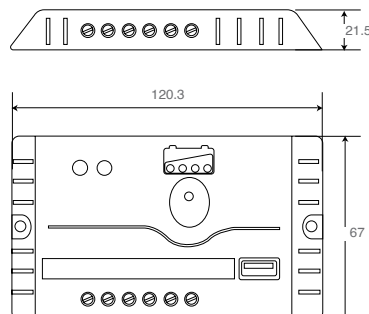
Electrical specifications	
Parameter	LS0512EU
Nominal system voltage	12VDC
Battery type	Sealed (Default)/Gel/Flooded
Battery input voltage range (V)	8~16
Rated charge current (A)	5
Rated discharge current(A)	5
Max. PV open circuit voltage(V)	30
Equalization voltage	Sealed:14.6V, Flooded:14.8V
Boost voltage	Gel:14.2V, sealed:14.4V, Flooded:14.6V
Float voltage	Gel/sealed/flooded:13.8V
Output USB	1.2A/+5V
Grounding	Common Positive
Mechanical specifications	
Dimensions (mm)	109.7×65.5×20.8
Weight(Kg)	0.09
General information	
Operating temperature range(°C)	-35~50
Relative humidity (%)	≤95
Ingress Protection	IP20





Charge Controller Ls Eu - 10A

Code:270401018

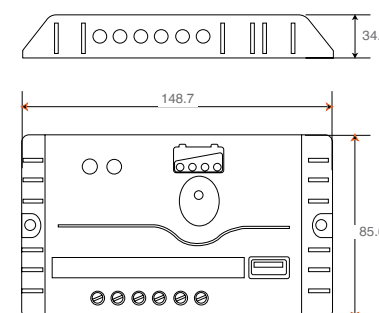


Electrical specifications	
Parameter	LS1024EU
Nominal system voltage	12/24VDC Auto
Battery type	Sealed (Default)/Gel/Flooded
Battery input voltage range (V)	8~32
Rated charge current (A)	10
Rated discharge current(A)	10
Max. PV open circuit voltage(V)	50
Equalization voltage	Sealed:14.6V, Flooded:14.8V
Boost voltage	Gel:14.2V, sealed:14.4V, Flooded:14.6V
Float voltage	Gel/sealed/flooded:13.8V
Output USB	1.2A/+5V
Grounding	Common Positive
Mechanical specifications	
Dimensions (mm)	120.3*67*21.8
Weight(Kg)	0.1
General information	
Operating temperature range(°C)	-35~50
Relative humidity (%)	≤95
Ingress Protection	IP20



Charge Controller Ls EU-20A

Code:270401025



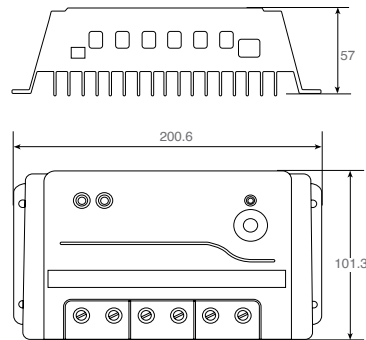
Electrical specifications	
Parameter	LS2024EU
Nominal system voltage	12/24VDC Auto
Battery type	Sealed (Default)/Gel/Flooded
Battery input voltage range (V)	8~32
Rated charge current (A)	20
Rated discharge current(A)	20
Max. PV open circuit voltage(V)	50
Equalization voltage	Sealed:14.6V, Flooded:14.8V
Boost voltage	Gel:14.2V, sealed:14.4V, Flooded:14.6V
Float voltage	Gel/sealed/flooded:13.8V
Output USB	1.2A/+5V
Grounding	Common Positive
Mechanical specifications	
Dimensions (mm)	148*85.6*34.8
Weight(Kg)	0.18
General information	
Operating temperature range(°C)	-35~50
Relative humidity (%)	≤95
Ingress Protection	IP20





Charge Controller Ls B - 30A

Code:270401027

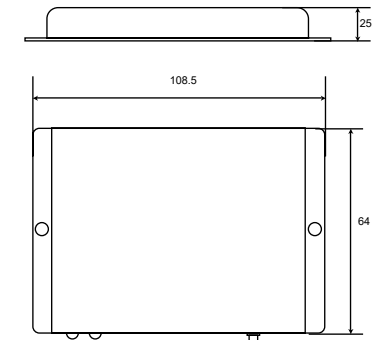


Electrical specifications	
Parameter	LS3024B
Nominal system voltage	12/24VDC Auto
Battery type	Sealed(Default)/Gel/Flooded/User
Battery input voltage range(V)	8~32
Rated charge current(A)	30
Rated discharge current(A)	30
Max. PV open circuit voltage(V)	50
Equalization voltage	Sealed:14.6V, Flooded:14.8V, User-Defined:9~17Vfi
Boost voltage	Gel:14.2V/Sealed:14.4V/ Flooded:14.6V, User-Defined:9~17Vfi
Float voltage	Gel/Sealed/ Flooded:13.8V, User-Defined:9~17Vfi
Grounding	Common Positive
Communication interface	RS485(RJ45)
Mechanical specifications	
Dimensions (mm)	200.6×101.3×57
Weight(Kg)	0.5
General information	
Operating temperature range(°C)	-35~+50
Relative humidity (%)	≤95
Ingress Protection	IP30



Charge Controller Ls BPD - 10A

Code:270401015



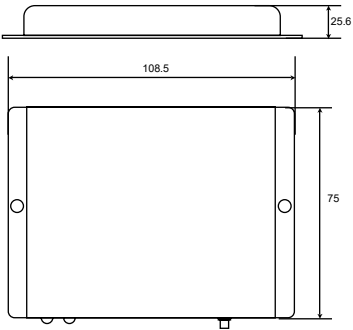
Electrical specifications	
Parameter	LS1024BPD
Nominal system voltage	12/24/VDC Auto
Rated charge current(A)	10
Rated discharge current(A)	10
Max. PV open circuit voltage(V)	50V
Battery type	Sealed(Default) /Gel/Flooded
Equalization voltage	sealed:14.6V, flooded:14.8V
Boost voltage	Gel:14.2V, sealed:14.4V, flooded:14.6V
Float voltage	Gel:14.2V, sealed:14.4V, flooded:14.6V
Grounding	Common Positive
Mechanical specifications	
Dimensions (mm)	108.5×64×25.6
Weight (Kg)	0.33
General information	
Operating temperature range	-35~+55
Ingress protection	IP67





Charge Controller Ls EPD - 10,20A

Code EPD/10A: 270401017
 Code EPD/20A: 270401024

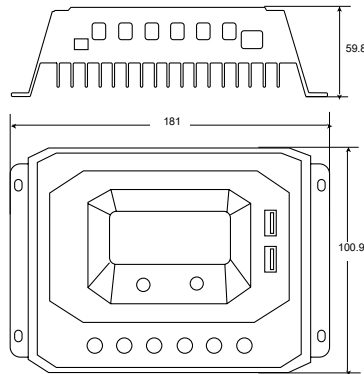


Electrical specifications		
Parameter	LS1024EPD	LS2024EPD
Nominal system voltage	12/24VDC Auto	
Battery type	Sealed	
Battery input voltage range(V)	8~32	
Rated charge current(A)	10	20
Rated discharge current(A)	10	20
Max. PV open circuit voltage(V)	50V	
Equalization voltage	14.8V(12V),29.6V(24V)	
Boost voltage	14.4V(12V),28.8V(24V)	
Float voltage	13.7V(12V),27.4V(24V)	
Grounding	Common Positive	
Mechanical specifications		
Dimensions (mm)	108.5×75×25.6	
Weight (Kg)	0.41	0.43
General information		
Operating temperature range(°C)	-35~+50	
Ingress protection	IP67	



Charge Controller 30A-Vs AU

Code:270401038



Electrical specifications	
Parameter	VS3048AU
Nominal system voltage	12/24/36/48VDC Auto
Battery type	Sealed/Gel/Flooded
Battery input voltage range(V)	9~64
Rated charge current(A)	30
Rated discharge current(A)	30
Max. PV open circuit voltage(V)	96V
Equalization voltage	Sealed:14.6V,Flooded:14.8V
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V
Float voltage	Gel/sealed/Flooded:13.8V
USB output	5VDC/2.4A
Grounding	Common Positive
Mechanical specifications	
Dimensions(mm)	181×100.9×59.8
Weight (Kg)	0.58
General information	
Operating temperature range(°C)	-25~+55
Relative humidity	≤95
Ingress Protection	IP30



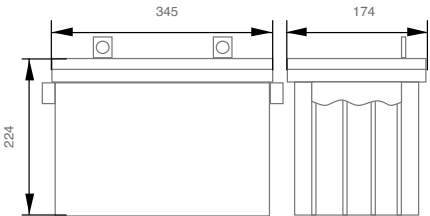


Solar BATTERY



Solar BATTERY 100Ah-12 V

Code: 270601027



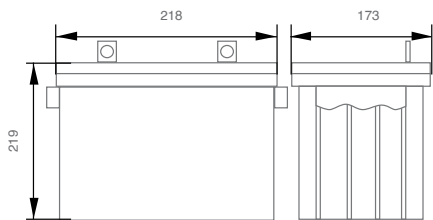
Electrical specifications	
Parameter(@25°C)	SFGHU100-12
Nominal Voltage(V)	12V
Open circuit voltage at full load	12.7~13 V
The lowest permissible voltage during discharge	9V
Charge voltage for cycle applications	14.20~14.40 V
Charge voltage for standby applications (float charge)	13.60~13.80 V
Correction resistance at full state of charge	-15 mV/°C
Internal resistance at full state of charge	6~10 mΩ
Maximum discharge current (1 sec)	750A
Maximum allowable discharge current(continual)	300A
Maximum allowable charge current	25A
Capacity@20 hour (Ah)	100
Electrical energy (Wh)	1025
Mechanical specifications	
Maximum dimensions(mm)	345×174×224
Weight(Kg)	30.15±0.65





UPS Gel Baterry 42Ah-12 V

Code: 270601029

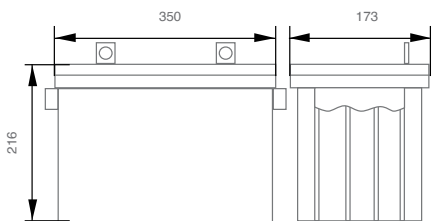


Electrical specifications	
Parameter(@25°C)	UFGMU42-12
Nominal Voltage(V)	12V
Open circuit voltage at full load	12.7~13 V
The lowest permissible voltage during discharge	9V
Charge voltage for cycle applications	14.20~14.40 V
Charge voltage for standby applications (float charge)	13.60~13.80 V
Correction resistance at full state of charge	-15 mV/°C
Internal resistance at full state of charge	6~10 mΩ
Maximum discharge current (1Sec)	325A
Maximum discharge current (continuous)	130A
Maximum allowable charge current (1Sec)	10A
Capacity@20 hour (Ah)	42
Electrical energy (Wh)	430
Mechanical specifications	
Maximum dimensions(mm)	218*173*219
Weight(Kg)	15



UPS Baterry Gel 65Ah-12 V

Code: 270601030

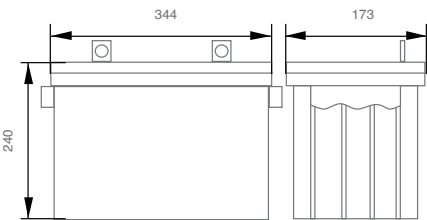


Electrical specifications	
Parameter(@25°C)	UFGMU65-12
Nominal Voltage(V)	12V
Open circuit voltage at full load	12.7~13 V
The lowest permissible voltage during discharge	9V
Charge voltage for cycle applications	14.20~14.40 V
Charge voltage for standby applications (float charge)	13.60~13.80 V
Correction resistance at full state of charge	-15 mV/°C
Internal resistance at full state of charge	6~10 mΩ
Maximum discharge current (1Sec)	500A
Maximum discharge current (continuous)	200A
Maximum allowable charge current (1Sec)	16A
Capacity@20 hour (Ah)	65
Electrical energy (Wh)	660
Mechanical specifications	
Maximum dimensions(mm)	350*173*216
Weight(Kg)	23





UPS Gel Batery 100Ah-12 V
 Code: 270601028



Electrical specifications	
Parameter(@25°C)	UFGMU100-12
Nominal Voltage(V)	12V
Open circuit voltage at full load	12.7~13 V
The lowest permissible voltage during discharge	9V
Charge voltage for cycle applications	14.20~14.40 V
Charge voltage for standby applications (float charge)	13.60~13.80 V
Correction resistance at full state of charge	-15 mV/°C
Internal resistance at full state of charge	6~10 mΩ
Maximum discharge current (1Sec)	750A
Maximum discharge current (continuous)	300A
Maximum allowable charge current (1Sec)	25A
Capacity@20 hour (Ah)	100
Electrical energy (Wh)	1025
Mechanical specifications	
Maximum dimensions(mm)	344-173*240
Weight(Kg)	30

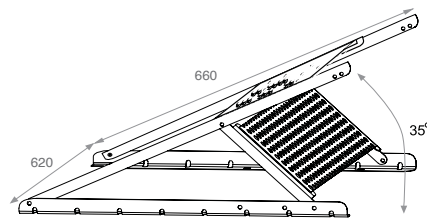
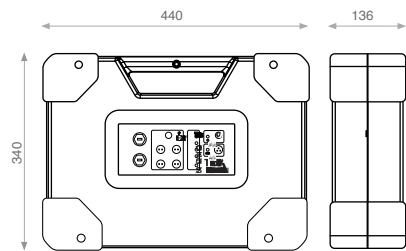


Portable Solar System

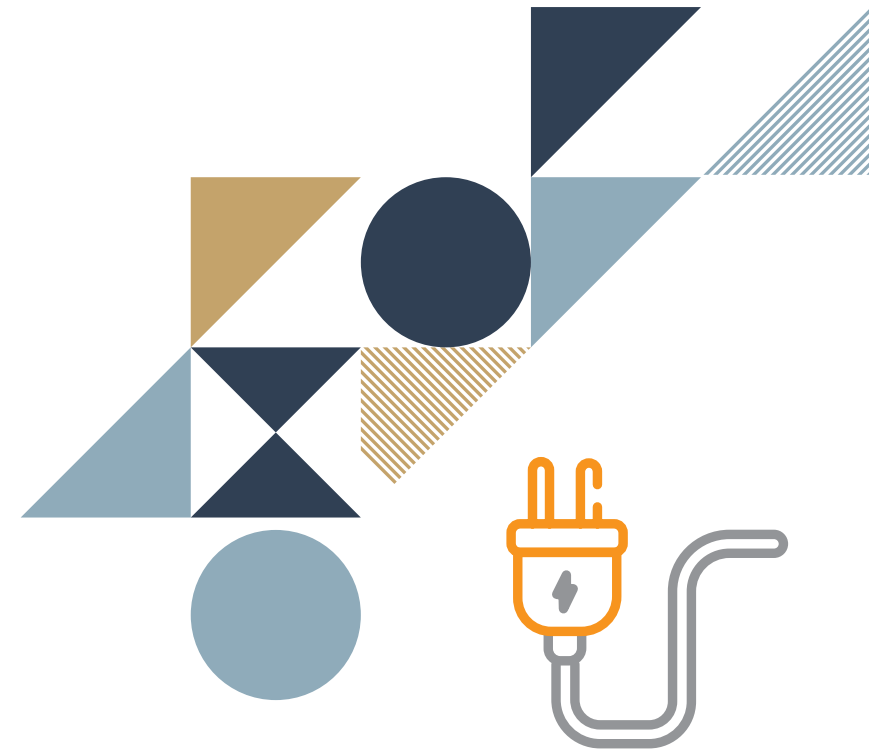


Portable solar system - TIDA

Code: 415701003



Electrical Specifications		
Parameter		GS-40/100-Li
Appliance Voltage (VDC)		12
Battery type/voltage and capacity		Lithium-ion/40Ah,14.4V
Panel type/power of panel		Polycrystal/100W
Type of Controller charging		MPPT
Rated Voltage of the charge controller		12/24VDC
Rated current of the charge controller		10A
Lighting outputs		12V/5W
Output USB/Fast charge		2~3A/9~12V/36W
General Specifications		
Ingress Protection (IP)	appliance	IP65
	Panel	IP67
Working Temperature Range (°C)		-10~+50
Battery charging temperature (°C)		0~45
Other Specifications		
Light Bulb		E27,12V,5W, LED Bulb
Number /type of inputs		1pcs/ solar panel, 230Vac
Number /type of outputs		2pcs/ USB port (Fast charge) 4pcs/ GX16 connector
Mechanical specifications		
appliance	Dimensions(mm)	440*340*136
	Weight) Kg)	~7
Solar panel	Body color/material	Gray/ Polycarbonate
	Dimensions(mm)	1010*660*25
	Weight) Kg)	7.7
Structure	material	Metal structure Hot galvanized coating
	Adjustable angles	25°,30°,35°
	Dimensions(mm)	660*620*425(35°)
	Weight) Kg)	~2.7

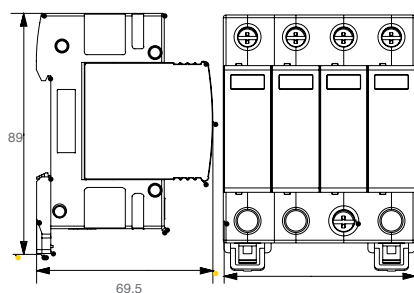


Accessories



AC Surge Arrester (380VCD-4P)

Code: 270701012

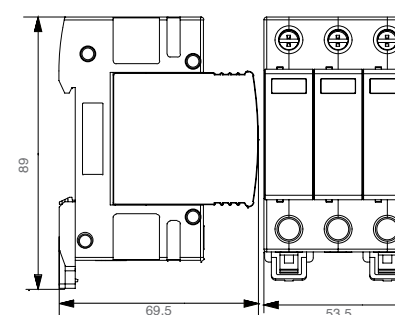


Electrical specifications		
Parameter		BUA-40/4
Max continuous operational voltage (VAC)		385
Nominal discharge current (KA)		20
Maximum discharge current (KA)		40
Voltage protection level Up (KV)		≤1.8
Response time (ns)		≤25
General information		
Operation temperature range (°C)		-40~+80
Relative humidity (%)		30~90
Ingress protection		IP20
Mechanical specifications		
Dimension(mm)		10x38
Wire	Hard cable (mm2)	4~25
	Flexible cable (mm2)	4~16
Number of poles		4



DC Surge Arrester (1000VAC-3P)

Code: 270701011



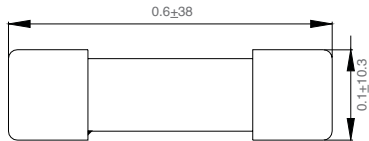
Electrical specifications		
Parameter		BUD-40/3
Open Voltage (VDC)		1000
Max. continuous operational Voltage (VDC)		1000
Nominal discharge current (KA)		20
Maximum discharge current (KA)		40
Voltage protection level up (KV)		≤3.8
Response Time(ns)		≤25
General information		
Operating temperature range(°C)		-40~+80
Relative humidity (%)		30~90
Ingress protection		IP20
Mechanical specifications		
Dimension(mm)		چهار پل
Wire	Hard cable (mm2)	4~25
	Flexible cable (mm2)	4~16
Weight (Kg)		0.36
Number of poles		3



DC Fuse

Code: 270701013

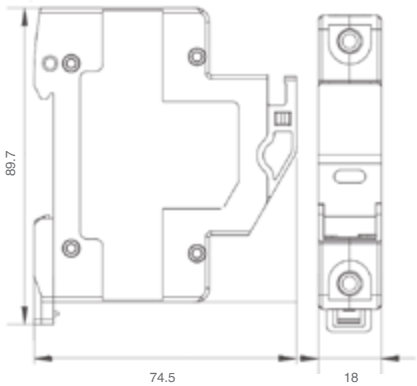
Electrical specifications	
Parameter	A732150700
Rated operating voltage (VDC)	1000
Rated Current (A)	15
Breaking Capacity (KA)	30
Time constant (m)	1~3
Power loss(W)	3
Mechanical specifications	
Dimensions(mm)	10×38



Fuse Holder

Code: 270701014

Electrical specifications	
Parameter	PV DC BR-30
Rated Working Voltage (VDC)	1000
Rated Current (A)	30
Breaking Capacity (KA)	20
Max. Power Dissipation(W)	3
Mechanical specifications	
Dimensions(mm)	10×38
Weight (Kg)	0.07
Wire(mm2)	2.5~25
Pole	One pole
Installation Class	III
General information	
Operating temperature (°C)	-30~+70
Relative Humidity (%)	+20C°≤95%, +40C°≤50%
Ingress Protection	IP20

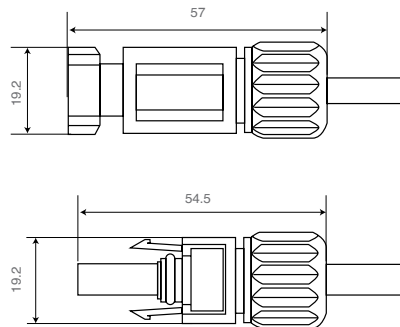




MC4 Connector

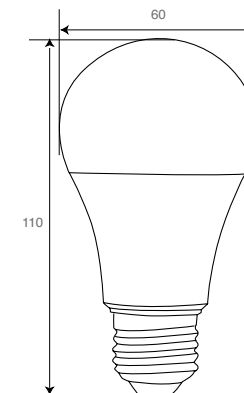
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Electrical specifications	
Parameter	QC4.10-ab
Rated Voltage(V)	IEC1000V/UL 1000V
Rated Current(A)	30A,35A,40A
Contact Resistance (mΩ)	<5
Size of cable	2.5mm ² ,4.0mm ² ,6.0mm ² /14AWG,12AWG,10AWG
Protection Class	II
General information	
Operating temperature range(°C)	-40 ~+85
Ingress Protection	IP68



LED Bulb

Code: 270703002



Electrical specifications	
Parameter	RTL05
Nominal Input Power(W)	5
Rated operating voltage (VDC)	12
Photometric specifications	
Luminous Flux (Lm)	500
Luminous Efficiency(Lm/W)	70
Color Temperature (k)	6500
Color Rendering Index	85
SDCM Initial and Value	5SDCM
Mechanical specifications	
Dimensions(mm)	110×Φ60
General information	
سریس	E27
نوع LED	SMD2835
Angle of radiation (Degree)	270

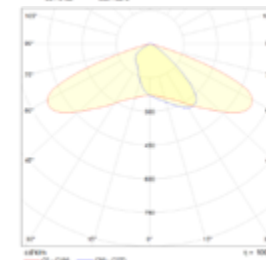
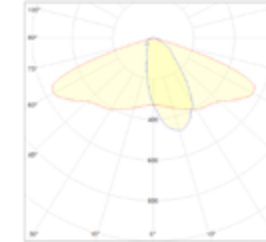
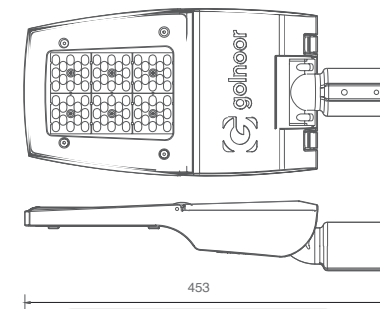


DC Luminaire



Setareh DC-S

Code: 411208



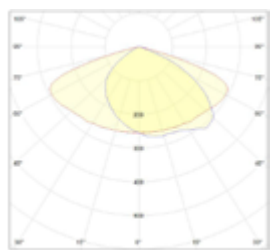
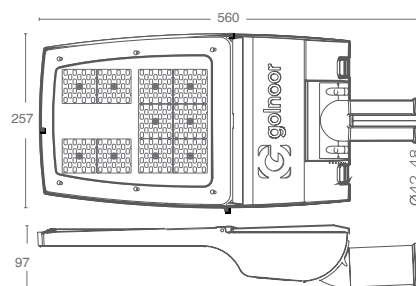
Electrical specifications						
Parameter	20W	25W	30W	35W	40W	50W
System input voltage(V-DC)	12/24 V					
Nominal Input Voltage (V-DC)	0.43	0.55	0.67	0.73	0.82	1.03
Input Voltage Range(V-DC)	48					
Led Module Type	integrated					
Nominal Input Power(W)	20	25	30	35	40	50
Photometric specifications						
Light Source Led	SMD LED					
Number of LEDs In the Module(pcs)	24	48	48	48	48	72
Nominal Power of Led(W)	1.5					
Luminous Flux (Lm)	2500	3125	3750	4375	5000	6250
Luminous Efficiency (Lm/W)	125					
Color Temperature (k)	3000,4000,5000,6500					
Color Rendering Index	75					
SDCM Initial and Value	5SDCM					
Photometric Code	730/559,740/559,750/559,765/559					
Lumen Maintenance Code	9					
Mechanical specifications						
Dimension(mm)	453×206×86					
Weight (Kg)	2.1 ~ 2.5					
Ingress Protection	IP66					
Protection Against Mechanical Impacts	IK07					
Body Material	Die-cast Aluminum					
Diffuser Material	Tempered glass					
Body Coating	Electrostatic powder painting					
Pipe Holder Diameter(mm)	Φ33/42					
General information						
Rated Ambient temperature (°C)	25					
Working Temperature Range(°C)	-20~+50					
Maximum Allowed Humiding(%)	95					
Rated Useful Life (L70B10) (hrs)	70000					
Rated Abrupt Failure Value (%)	15					
Global Standards						
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules					





Setareh DC-M

Code: 411209

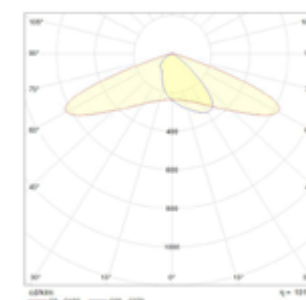
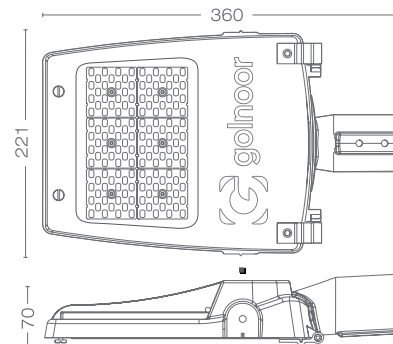


Electrical specifications					
Parameter	60W	70W	80W	90W	100W
System input voltage(V-DC)	12/24 V				
Nominal Input Voltage (V-DC)	1.66	1.93	2.2	2.47	2.77
Input Voltage Range(V-DC)	36				
Led Module Type	integrated				
Nominal Input Power(W)	60	70	80	90	100
Photometric specifications					
Light Source Led	SMD LED				
Number of LEDs In the Module(pcs)	72	84	96	108	120
Nominal Power of Led(W)	1.5				
Luminous Flux (Lm)	7800	9100	10400	11700	13000
Luminous Efficiency(Lm/W)	130				
Color Temperature (k)	3000,4000,5000,6500				
Color Rendering Index	75				
SDCM Initial and Value	5SDCM				
Photometric Code	730/559,740/559,750/559,765/559				
Lumen Maintenance Code	9				
Mechanical specifications					
Dimension(mm)	560×257×97				
Weight (Kg)	3.75				
Ingress Protection	IP66				
Protection Against Mechanical Impacts	IK07				
Body Material	Die-cast Aluminum				
Diffuser Material	Tempered glass				
Body Coating	Electrostatic powder painting				
Pipe Holder Diameter(mm)	Φ42/48				
Mechanical specifications					
Dimension(mm)	L560*W257*H97				
Weight (Kg)	3.75				
Ingress Protection	IP66				
Protection Against Mechanical Impacts	IK07				
Body Material	Die-cast Aluminum				
Diffuser Material	Tempered glass				
Body Coating	Electrostatic powder painting				
Pipe Holder Diameter(mm)	Φ42/48				
General information					
Rated Ambient temperature (°C)	25				
Working Temperature Range(°C)	-20~+50				
Maximum allowed Humiding(%)	95				
Rated Useful Life (L70B10) (hrs.)	100000				
Rated Abrupt Failure Value (%)	15				
Global Standards					
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules				



Soheil DC-1

Code: 411211



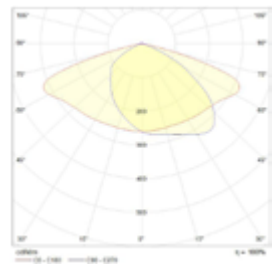
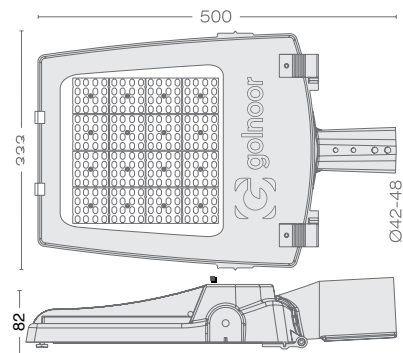
Electrical specifications				
Parameter	20W	30W	50W	60W
System input voltage(V-DC)	12/24		24	
Nominal Input Voltage (V-DC)	0.43	0.61	1.03	1.24
Input Voltage Range(V-DC)	48			
Led Module Type	integrated			
Nominal Input Power(W)	20	30	50	60
Photometric specifications				
Light Source Led	SMD LED			
Number of LEDs In the Module(pcs)	24	24	48	48
Nominal Power of Led(W)	1.5			
Luminous Flux (Lm)	2200	3300	5500	6600
Luminous Efficiency (Lm/W)	110			
Color Temperature (k)	3000,4000,5000,6500			
Color Rendering Index	75			
SDCM Initial and Value	5SDCM			
Photometric Code	730/559,740/559,750/559,765/559			
Lumen Maintenance Code	9			
Mechanical specifications				
Dimension(mm)	L360*W221*H70			
Weight (Kg)	2.45			
Ingress Protection	IP66			
Protection Against Mechanical Impacts	IK07			
Body Material	Die-cast Aluminum			
Diffuser Material	Tempered glass			
Body Coating	Electrostatic powder painting			
Pipe Holder Diameter(mm)	Φ33/42			
Installation height	5~7			
General information				
Rated Ambient temperature (°C)	25			
Working Temperature Range(°C)	-20~+50			
Maximum Allowed Humiding(%)	95			
Rated Useful Life(L70B10) (hrs)	70000			
Rated Abrupt Failure Value (%)	15			
Global Standards				
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules			





Soheil DC-2

Code: 411214

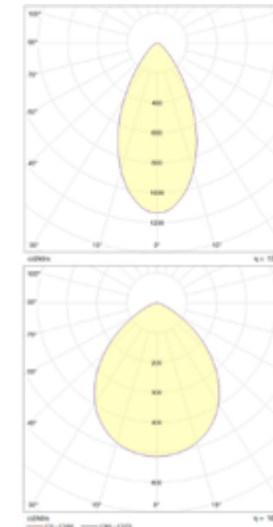
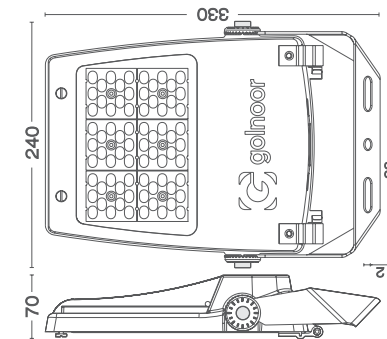


Electrical specifications	
Parameter	100W
System input voltage(V-DC)	24
Nominal Input Voltage (V-DC)	2.71
Input Voltage Range(V-DC)	36
Led Module Type	integrated
Nominal Input Power(W)	100W
Photometric specifications	
Light Source Led	SMD LED
Number of Leds In the Module(pcs)	96
Nominal Power of Led(W)	1.5
Luminous Flux (Lm)	11000
Luminous Efficiency(Lm/W)	110
Color Temperature (k)	3000,4000,5000,6500
Color Rendering Index	75
SDCM Initial and Value	5SDCM
Photometric Code	730/559,740/559,750/559,765/559
Lumen Maintenance Code	9
Mechanical specifications	
Dimension(mm)	500×333×82
Weight (Kg)	4.4
Ingress Protection	IP66
Protection Against Mechanical Impacts	IK07
Body Material	Die-cast Aluminum
Diffuser Material	Tempered glass
Body Coating	Electrostatic powder painting
Pipe Holder Diameter(mm)	Φ 42 / 48
General information	
Rated Ambient temperature (°C)	25
Working Temperature Range(°C)	-20~+50
Maximum Allowed Humiding(%)	95
Rated Useful Life (L70B10) (hrs)	70000
Rated Abrupt Failure Value (%)	15
Global Standards	
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules



Ario DC-1

Code: 411210

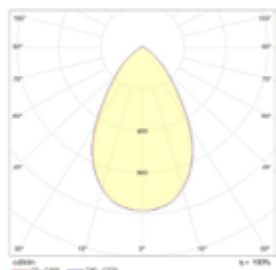
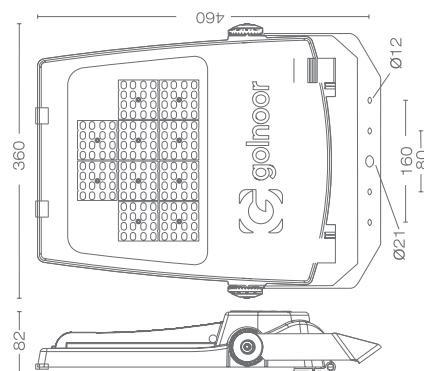


Electrical specifications			
Parameter	30W	50W	60W
System input voltage(V-DC)	12/24 V		
Nominal Input Voltage (V-DC)	0.61	1.03	1.24
Input Voltage Range(V-DC)	48		
Led Module Type	integrated		
Nominal Input Power(W)	30	50	60
Photometric specifications			
Light Source Led	SMD LED		
Number of LEDs In the Module(pcs)	24	48	48
Nominal Power of Led(W)	1.5		
Luminous Flux (Lm)	3300	5500	6600
Luminous Efficiency(Lm/W)	110		
Color Temperature (k)	3000,4000,5000,6500		
Color Rendering Index	75		
SDCM Initial and Value	5SDCM		
Photometric Code	730/559,740/559,750/559,765/559		
Lumen Maintenance Code	9		
Angle of radiation (Degree)	25,60,90		
Mechanical specifications			
Dimension(mm)	330×240×70		
Weight (Kg)	2.25		
Ingress Protection	IP66		
Protection Against Mechanical Impacts	IK07		
Body Material	Die-cast Aluminum		
Diffuser Material	Tempered glass		
Body Coating	Electrostatic powder painting		
General information			
Rated Ambient temperature (°C)	25		
Working Temperature Range(°C)	-20~+50		
Maximum Allowed Humiding (%)	95		
Rated Useful Life(L70B10) (hrs)	70000		
Rated Abrupt Failure Value (%)	15		
Global Standards			
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules		





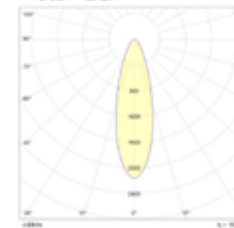
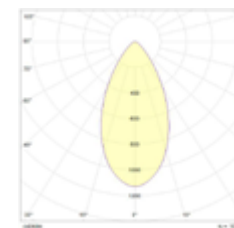
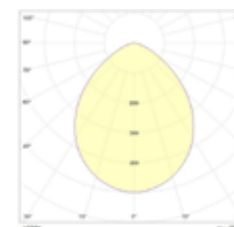
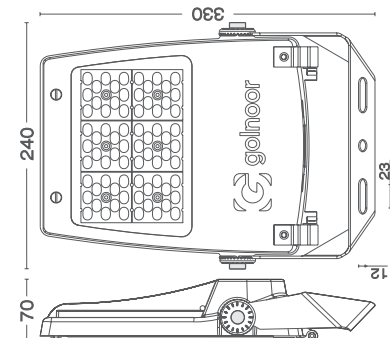
Ario DC-2
Code: 411213



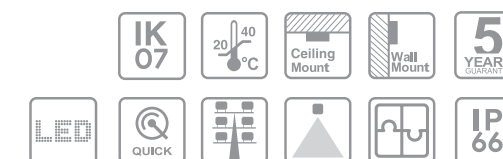
Electrical specifications	
Parameter	100W
System input voltage(V-DC)	24
Nominal Input Voltage (V-DC)	2 .71
Input Voltage Range(V-DC)	36
Led Module Type	integrated
Nominal Input Power(W)	100
Photometric specifications	
Light Source Led	SMD LED
Number of LEDs In the Module(pcs)	96
Nominal Power of Led(W)	1.5
Luminous Flux (Lm)	11000
Luminous Efficiency(Lm/W)	110
Color Temperature (K)	3000,4000,5000,6500
Color Rendering Index	75
SDCM Initial and Value	5SDCM
Photometric Code	730/559,740/559,750/559,765/559
Lumen Maintenance Code	9
Angle of radiation (Degree)	25,60,90
Mechanical specifications	
Dimension(mm)	L450*W360*H82
Weight (Kg)	4.45
Ingress Protection	IP66
Protection Against Mechanical Impacts	IK07
Body Material	Die-cast Aluminum
Diffuser Material	Tempered glass
Body Coating	Electrostatic powder painting
General information	
Rated Ambient temperature (°C)	25
Working Temperature Range(°C)	-20~+40
Maximum Allowed Humiding (%)	95
Rated Useful Life(L70B10) (hrs)	70000
Rated Abrupt Failure Value (%)	15
Global Standards	
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules



Ariel DC-1
Code: 411305



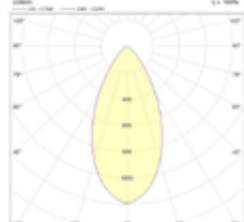
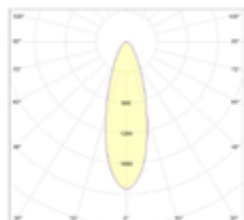
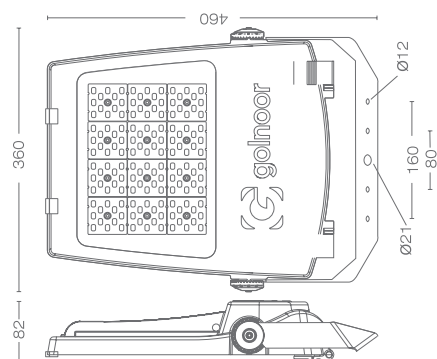
Electrical specifications		
Parameter	35W	50W
System input voltage(V-DC)	12/24 V	
Nominal Input Voltage (V-DC)	0.73	1.06
Input Voltage Range(V-DC)	48	
Led Module Type	integrated	
Nominal Input Power(W)	35	50W
Photometric specifications		
Light Source Led	SMD LED	
Number of LEDs In the Module(pcs)	48	72
Nominal Power of Led(W)	1.5	
Luminous Flux (Lm)	4380	6250
Luminous Efficiency(Lm/W)	125	
Color Temperature (k)	3000,4000,5000,6500	
Color Rendering Index	75	
SDCM Initial and Value	5SDCM	
Photometric Code	730/559,740/559,750/559,765/559	
Lumen Maintenance Code	9	
Angle of radiation (Degree)	25,60,90	
Mechanical specifications		
Dimension(mm)	330×240×70	
Weight (Kg)	2.1	
Ingress Protection	IP66	
Protection Against Mechanical Impacts	IK07	
Body Material	Die-cast Aluminum	
Diffuser Material	Tempered glass	
Body Coating	Electrostatic powder painting	
General information		
Rated Ambient temperature (°C)	25	
Working Temperature Range(°C)	-20~+40	
Maximum Allowed Humiding(%)	95	
Rated Useful Life(L70B10) (hrs)	70000	
Rated Abrupt Failure Value (%)	15	
Global Standards		
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules	



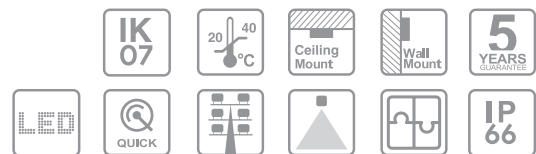


Ariel DC-2

Code: 411312



Electrical specifications		
Parameter	75W	100W
System input voltage(V-DC)	24	
Nominal Input Voltage (V-DC)	2.14	2.77
Input Voltage Range(V-DC)	36	
Led Module Type	integrated	
Nominal Input Power(W)	75	100
Photometric specifications		
Light Source Led	SMD LED	
Number of LEDs In the Module(pcs)	96	120
Nominal Power of Led(W)	9750	13000
Luminous Flux (Lm)	130	
Luminous Efficiency(Lm/W)	3000/4000/5000/6500	
Color Temperature (k)	75	
Color Rendering Index	5SDCM	
SDCM Initial and Value	730/559,740/559,750/559,765/559	
Photometric Code	9	
Lumen Maintenance Code	25,60,90,50×150,100×25×45	
Mechanical specifications		
Dimension(mm)	460×360×82	
Weight (Kg)	4.55	
Ingress Protection	IP66	
Protection Against Mechanical Impacts	IK07	
Body Material	Die-cast Aluminum	
Diffuser Material	Tempered glass	
Body Coating	Electrostatic powder painting	
General information		
Rated Ambient temperature (°C)	25	
Working Temperature Range(°C)	-20~+40	
Maximum Allowed Humiding(%)	95	
Rated Useful Life(L70B10) (hrs)	70000	
Rated Abrupt Failure Value (%)	15	
Global Standards		
IES LM - 80	Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays and Modules	





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