

**solar outdoor
lighting systems**



X-SERIES LED



**AMERICAN MADE X SERIES LED SOLAR LIGHTING SYSTEM:
X-35-LED-13000-360**

SYSTEM OUTPUT	12000 LUMENS PER FIXTURE
SYSTEM VOLTAGE	INPUT 12/24 VDC – OUTPUT 12/24 VDC
SYSTEM CERTIFICATION	<ul style="list-style-type: none"> - UL compliant system to – UL 1598 - CAN/CSA C22.2 No. 250.0 - Dark Sky Compliant
OPERATIONAL TEMPERATURES	System is operational from -60° Celsius (with un-frozen batteries) to maximum temperature range of 60° Celsius with 90% humidity
SOLAR MODULES	<ul style="list-style-type: none"> - High efficiency UL, CUL, and CE listed 360 watts of panel Monocrystalline (if available) - 20 year warranty - Anti-corrosion- salt spray tested
BATTERY ENCLOSURE	<ul style="list-style-type: none"> - Aluminum battery enclosure - Pre-wired and tested - Designed for a harsh or marine environment - Thermal resistant powder coated to resist salt water spray and sand - Raised ridge rubber battery mat for thermal battery protection
ELECTRONICS	<ul style="list-style-type: none"> - Pre-wired and mounted in battery enclosure box - Triple circuit breaker protected (no fuse replacement) - Maximum Power Point Tracking (MPPT) charge controller is reverse polarity protected and cannot be damaged by wiring incorrectly - Instant light test switch – no need to wait for sunset to confirm correct installation
LED LIGHT FIXTURE	<ul style="list-style-type: none"> - Dark Sky Compliant - Glass cut off optics <p>Phillips Illumiled 5050 LED Chips 160-170 lumens per watt</p> <p>Color Temperature Options: <input type="checkbox"/> 4300k (standard option)</p>
TOP OR SIDE OF POLE SOLAR MOUNT	Aluminum solar array mounting system to provide multiple degrees of adjustments for more precise alignment with the sun
GEL PACK BATTERY	<ul style="list-style-type: none"> - Zero maintenance gel pack battery - High capacity deep cycle - 3+ days back up power - Automatic low-voltage shutdown to protect battery - Battery operating temperature: -60° Celsius to 60° Celsius

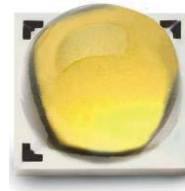
Product Benefits

PHILIPS LUMILEDS LED LUMINOUS SOURCE

The new SLI Series LED street light is utilizing PHILIPS LUXEON® T LED luminous source, providing excellent lumen output, long-lasting stability and splendid sight.

Each PHILIPS LUXEON® T chip owns electrostatic protection component, maximally avoid the damage of electrostatic.

More information about the PHILIPS LUXEON® Rebel ES and solid-state lighting technologies can be found at www.philipslumileds.com.



- Superior efficacy
- Leading lumen output
- Ultimate design flexibility



MW MEAN WELL LED DRIVER

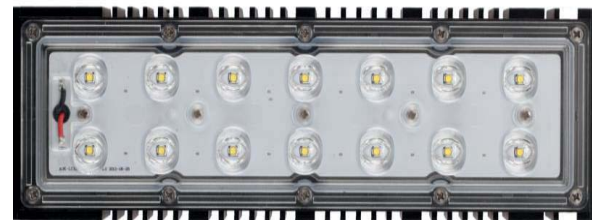


Full range SLI Series LED street light utilizing MeanWell HLG Series high-end driver. Providing great luminaire stability, lifespan and optimal performance status.

More information about the MeanWell HLG Series and LED driver technologies, please visit www.meanwell.com

BRAND-NEW LED MODULE DESIGN

Exquisite design with powerful thermal output, with more reliable waterproof performance.



With over 15 years experience in street and parking lot lighting, Solar Lighting International's SLI Series Street & Parking lighting continues. SLI's street and parking lot lighting reflects reliability and performance. Each design has been independently verified and tested by third party professional laboratories.

Equipped with exceptional 5th generation LED module design, the brand new SLI Series LED Street Light will provide superior luminous output, stability, and longevity, providing the most cost-effective LED Street Light on the market today.

0-90° Bracket Adjustment

The angles of the bracket of iL street light can be adjusted from 0 to 90 degrees to fit with different styles of poles.

Easy to assemble and disassemble for installation and maintenance, our light provides 160-170 lm per watt output, IP67 rated, 90% + driver efficiency, and a 5 year warranty for the entire system. *

*Battery warranty is prorated from the manufacturer



SLI-80W

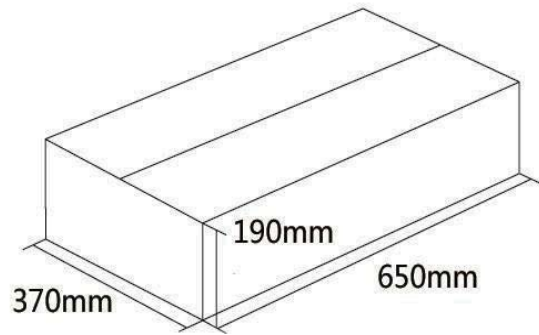
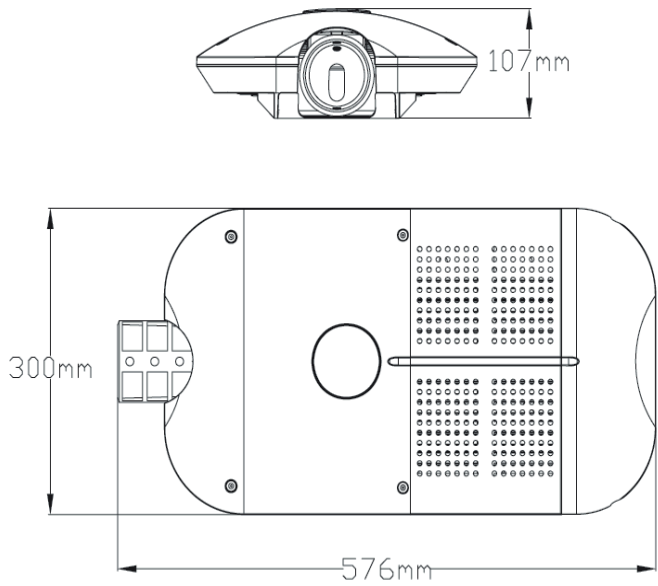
LED Street & Parking Light, 400W HIP Replacement



New



Black / white / silver / bronze color housing optional
1-10V / PWM / Resistance dimming optional



Specifications

Electrical Specifications

Model No.	SLI-80W
Nominal Wattage	80W
Nominal Voltage	90-305/277-480VAC, 50/60Hz 24VDC
Maximum Current	AC 0.9A (max) DC 0.3A (max)
Power Factor (PF)	>0.95
Driver Efficiency	>92%

Photometric Specifications

Luminous Flux	+Lumen tolerance +/- 5% 13000lm+
CRI	Ra>75
CCT	3000-6500K
Optional Beam Angle	60*150° / 70*150° / 80*150° / 90*100° / 60° / 120°

Mechanical Specifications

IP&IK Rating	IP66 & IK10
Lifetime	62000 hours - L70, @25°C
Heat Radiator	Anodized Aluminum
Lens	PC
Fixture Dimension	576*300*107mm 22.7*11.8*4.2 inches
Net Weight	7.5kg
Carton Dimension	650*370*190mm
Gross Weight	8.3kg

HYUNDAI SOLAR MODULE

RI
SERIES

Multi-Crystalline Type

HiS-M310RI HiS-M315RI HiS-M320RI

Mono-Crystalline Type

HiS-S330RI HiS-S335RI HiS-S340RI HiS-S345RI
HiS-S350RI HiS-S355RI HiS-S360RI



72

Cells



For Commercial & Utility Applications



More Power Generation In Low Light

MADE IN KOREA

Hyundai Cell, Made in Korea



PERL Technology

PERL technology provides ultra-high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



Low LID / PID

Both LID(Light Induced Degradation) and PID(Potential Induced Degradation) are strictly eliminated to ensure higher actual yield during lifetime.



Mechanical Strength

Tempered glass and reinforced frame design withstand rigorous weather conditions such as heavy snow and strong wind.



Reliable Warranty

Global brand with powerful financial strength provide reliable 25-year warranty.



Corrosion Resistant

Various tests under harsh environmental conditions such as ammonia and salt-mist passed.



UL / VDE Test Labs

Hyundai's R&D center is an accredited test laboratory of both UL and VDE.

Hyundai's Warranty Provisions

10 YEARS

- 10-Year Product Warranty
- On materials and workmanship

25 YEARS

- 25-Year Performance Warranty
- 90% of guaranteed min. power for 10 years
- 80% of guaranteed min. power for 25 years

About Hyundai Solar

Established in 1972, Hyundai Heavy Industries (HHI) is one of the most trusted names in the heavy industries sector with 48,000 employees and more than 40 Billion USD in annual sales (2015). As a global leader and innovator, Hyundai Heavy Industries is committed to building a future growth engine by developing and investing heavily in the field of renewable energy.

Started as a core business division of HHI, Hyundai Solar (Hyundai Heavy Industries Green Energy) now stands as an independent company and an affiliate of HHI as from December 2016. It is the largest and the longest standing PV cell and module manufacturer in South Korea with 800 MW of module production capacity. We have strong pride in providing high-quality solar PV products to more than 3,000 customers worldwide.

Certification



Electrical Characteristics

		Multi-Crystalline Module (HiS-M__RI)			Mono-Crystalline Module (HiS-S__RI)						
		310	315	320	330	335	340	345	350	355	360
Nominal Output (P _{mpp})	W	310	315	320	330	335	340	345	350	355	360
Open Circuit Voltage (V _{oc})	V	45.3	45.3	45.5	46.3	46.5	46.7	46.9	47.1	47.3	47.4
Short Circuit Current (I _{sc})	A	8.9	9.0	9.0	9.3	9.4	9.5	9.6	9.6	9.7	9.8
Voltage at P _{max} (V _{mpp})	V	36.0	36.2	36.4	38.0	38.2	38.4	38.6	38.7	38.9	39.1
Current at P _{max} (I _{mpp})	A	8.6	8.7	8.8	8.7	8.8	8.9	9.0	9.0	9.1	9.2
Module Efficiency	%	15.8	16.1	16.4	16.9	17.1	17.4	17.6	17.9	18.1	18.4
Cell Type	-	6", multi-crystalline silicon			6", mono-crystalline silicon						
Maximum System Voltage	V	1,000			1,000						
Temperature coefficient of P _{max}	%/K	-0.41			-0.40						
Temperature coefficient of V _{oc}	%/K	-0.31			-0.29						
Temperature coefficient of I _{sc}	%/K	0.039			0.039						

*All data at STC (Standard Test Conditions). Above data may be changed without prior notice.

Mechanical Characteristics

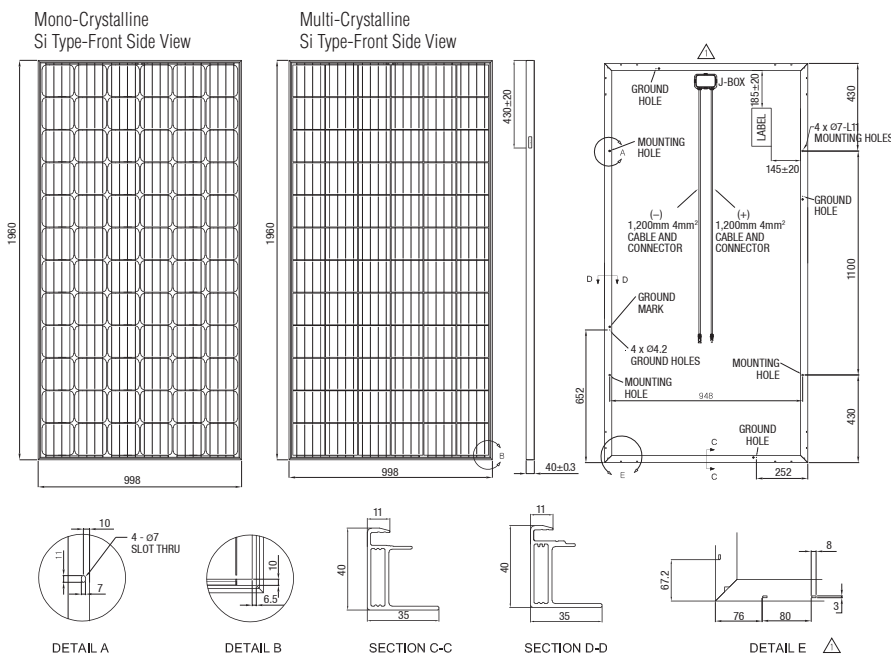
Dimensions	998 mm (39.29") (W) x 1,960 mm (77.17") (L) x 40 mm (1.57") (H)
Weight	Approx. 22.9 kg (50.5 lbs)
Solar Cells	72 cells in series (6 x 12 matrix) (Hyundai cell, Made in Korea)
Output Cables	4 mm ² (12AWG) cables with polarized weatherproof connectors, IEC certified (UL listed and UL 4703 certified), Length 1.2 m (47.2')
Junction Box	IP67, weatherproof, IEC certified (UL listed)
Bypass Diodes	3 bypass diodes to prevent power decrease by partial shade
Construction	Front : Anti-reflection coated glass, 3.2 mm (0.126") Encapsulant : EVA Back Sheet : Weatherproof film
Frame	Clear anodized aluminum alloy type 6063

Installation Safety Guide

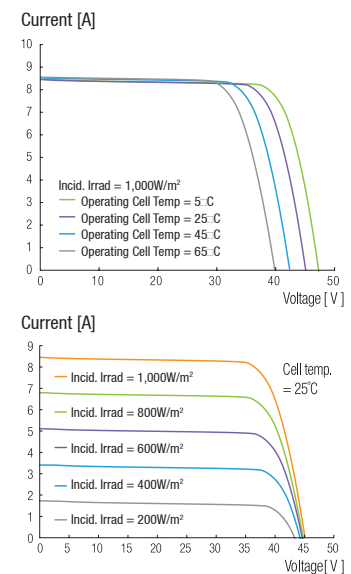
- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

Nominal Operating Cell Temperature	46°C ± 2
Operating Temperature	-40 – 85°C
Maximum System Voltage	DC 1,000 V (IEC) DC 1,000 V (UL)
Maximum Reverse Current	15A (Up to 350W) 20A (Above 355W)

Module Diagram (unit : mm)



I-V Curves





MOUNTS: SLI-TX-2 series



TOP-OF-POLE MOUNTING (TPM) :

SLI, Inc. manufactures and distributes a complete line of mounting kits to accommodate a wide range of off-grid applications. From single module top-of-pole mounts to complex multi-panel arrays, our mounting line has the flexibility to meet your mounting needs.

Our Top-of-Pole Mounts Feature:

Rugged Materials and Construction,
Precision Engineering and Expert Support

Pole Selection:

- Determine solar panel or solar array area (SQ. FT)
- Select pole size based on selection guidelines in Table 1.
(Solar Lighting International, Inc. does not supply poles with our mounting kits).



SLI-TX-2Series:
- Available in 2",3",4" and 6" SCH 40 pipe

Top-of-Pole : Guidelines For Pole Selection				
Module Area	Pole Size	Depth In Ground	Height Above Ground	Hole Diameter
15 SQ. FT.	2" SCH40 (2-3/8" OD)	30"-36"	48"-72"	8"-12"
28 SQ. FT.	3" SCH40 (3-1/2" OD)	36"-42"	48"-72"	12"-16"
35 SQ. FT.	3" SCH40 (3-1/2" OD)	38"-44"	60"-72"	12"-16"
60 SQ. FT.	4" SCH40 (4-1/2" OD)	42"-48"	60"-72"	16"-24"
90 SQ. FT.	6" SCH40 (6-5/8" OD)	48"-60"	60"-84"	24"-30"
120 SQ. FT.	6" SCH40 (6-5/8" OD)	48"-72"	72"-84"	24"-30"

Table 1

* Module Area (SQ. FT) = W (Panel Width in FT) x L (Panel Length in FT)

* Solar Array Area (SQ. FT) = W (Panel Width in FT) x L (Panel Length in FT) x Number of Panels per Array

Photographs are intended to portray typical enclosure appearance, actual appearance may vary.

- ① Panel Kit Rail
- ② Solar Panel
- ③ L-Bracket (Foot)
- ④ Cross Pipe
- ⑤ Pipe End Cap
- ⑥ U-Bolt with Saddle Bracket

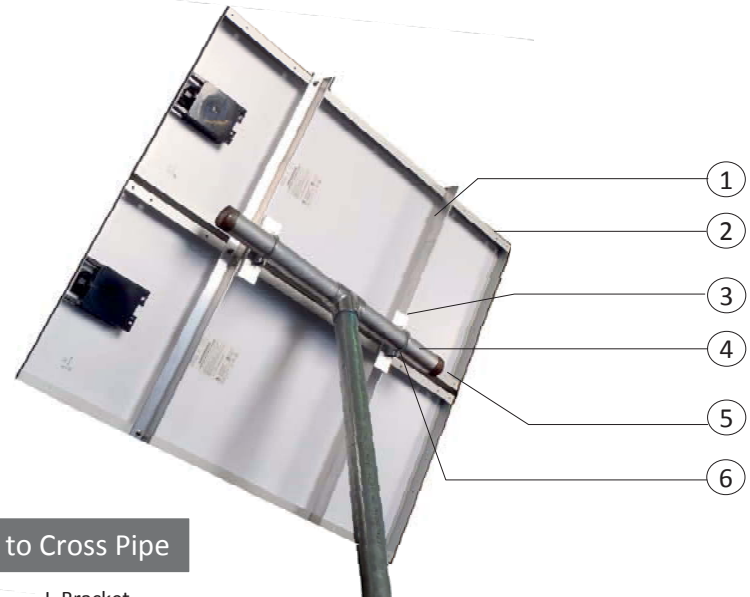
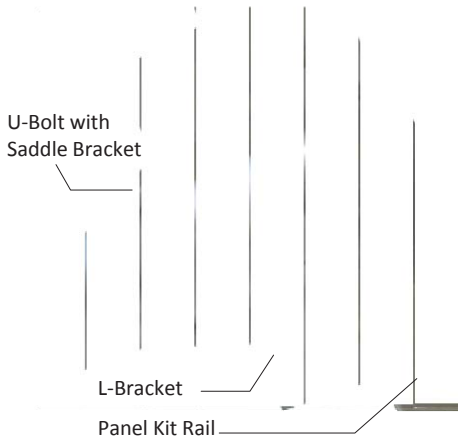
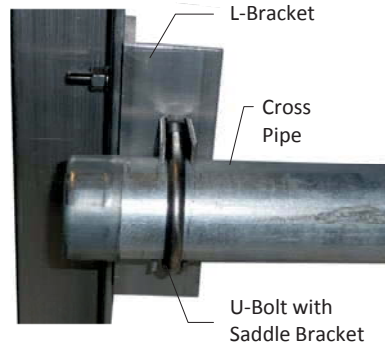


Figure 1. Mounting kit components

Attachment to Panel Kit Rail



Attachment to Cross Pipe



Array Tilt Angle Selection:

SITE LATITUDE: (In Degrees)	FIXED TILT ANGLE
0° TO 15°	15°
15° TO 25°	SAME AS LATITUDE
25° TO 30°	SAME AS LATITUDE +5°
30° TO 35°	SAME AS LATITUDE +10°
35° TO 40°	SAME AS LATITUDE +15°
40° +	SAME AS LATITUDE +20°

Table 2.

Figure 2. Use L-brackets to attach to the panel kit rails and to cross pipe.

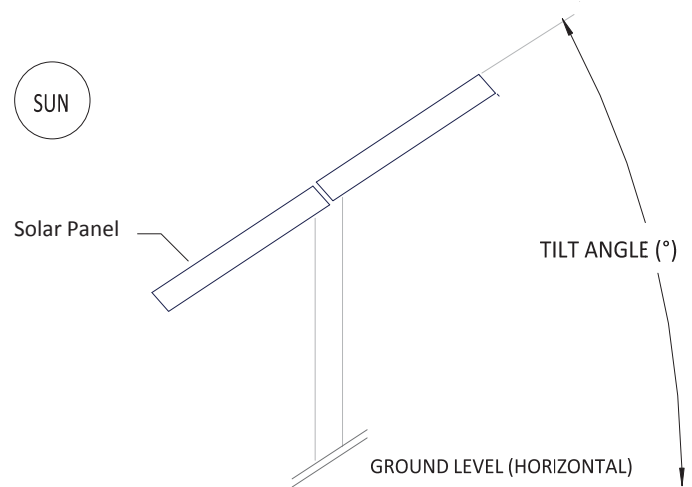
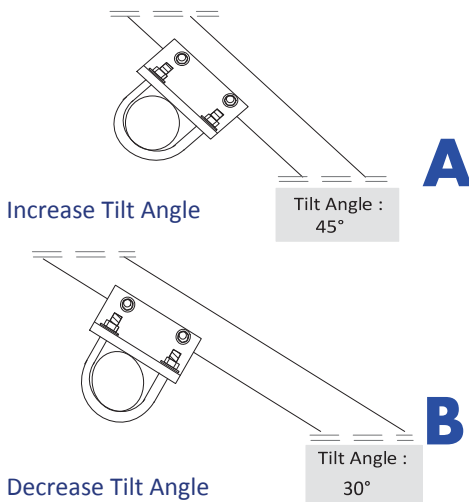


Figure 3. Tilt Angle Adjustments: Adjust PV Array Tilt Angle by rotating U-bolts to desired angle.

Locate array in an unshaded area facing equator and tilted from the horizontal at desired tilt angle (See Table 1).
 Solar arrays in the Northern Hemisphere face South for optimum energy production. Solar Arrays in the Southern hemisphere face North.
 When choosing a site, avoid trees, buildings or obstructions which could cast shadows on the solar modules. This is especially true during the winter months when the arc of the sun is lowest to the horizon.

SLI-3724

20A/15A, @12V/@24V, MPPT



Off-Grid | PV Street Lighting | Solar Traffic Signal

Flexible, reliable, and ready to work! The **SLI-3724**, featuring our patented MPPT technology, with a second battery output and IPN connector for remote display, is ideal for RVs and Marine applications. The **SLI-3724** can manage a 20A at 12V (or 15A at 24V) load output for small off-grid electrification applications. When programmed with an IPN Pro Remote or UCM, it is also ideal for PV street lighting with its dusk-to-dawn load control. It can also charge Lithium batteries when programmed with the IPN Pro Remote or UCM. Its IPN Network interface can communicate with other **Solar Lighting International** charge controllers as a single charging system, allowing increased flexibility and optimization in system design.



97% peak efficiency •

Fast MPP Tracking •

Excellent performance •

IPN Network compatible •

Great for PV Street Lighting •

Product Features

- Patented MPPT technology charges batteries faster
- Hassle-free auto-detection for 12V or 24V systems
- Networks with other **SLI, Inc.** controllers for higher power
- Fuller charges and longer battery life with advanced multistage charging (FLA,AGM,GEL)
- Equalize batteries automatically or manually
- Charge a second battery or control a DC load output
- Program for Dusk-to-Dawn Lighting Control with the IPN ProRemote
- Battery Temperature Compensation (with external battery temp. sensor)
- Protects battery from deep discharge (via load output)
- Automatically reconnects load when power is available

Display

- LEDs for charge and load status
- Remote Display optional (IPN ProRemote, IPN Remote)

Protection

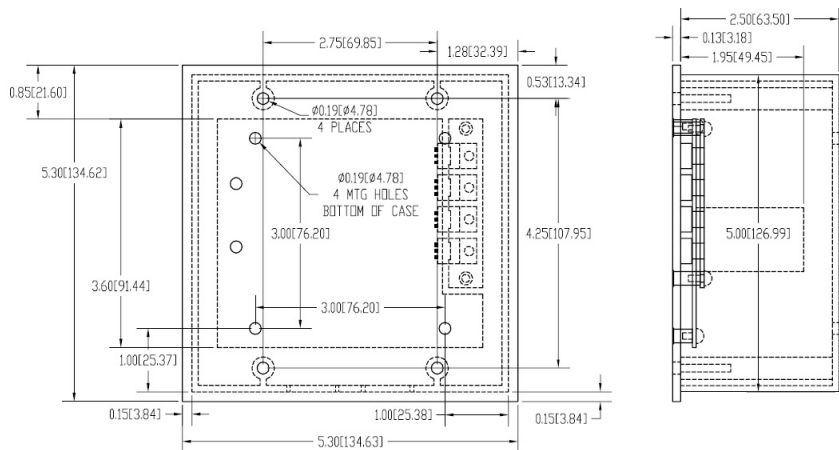
- PV array overload
- PV array reverse polarity
- Battery reverse polarity

Accessories

- IPN Remote - remote display for monitoring one or more controllers
- IPN ProRemote - remote display w/ programming and battery monitoring
- UCM - monitor and program controllers online
- External battery temperature sensor

Specifications:	SLI-3724 @12V	SLI-3724 @24V
Maximum PV Power:	270W with 36-cell PV panel ^(*) 200W with 60/72-cell PV panel ^(*)	400W with 72-cell PV panel ^(*)
Rated Battery (Output) Current:	20A with 36-cell PV panel ^(*) 15A with 60/72-cell PV panel ^(*)	15A with 72-cell PV panel ^(*)
Conversion Efficiency:	97% (typical @28V / 12A output)	
Power Consumption:	0.20W (typical standby)	
Recommended Max Panel Voc at STC:	45.6V (Max Panel Input 57V)	
Charge Profile:	Multi-Stage plus Manual or Automatic Equalization	
Absorption Voltage:	14.2V ⁽¹⁾	28.4V ⁽¹⁾
Float Voltage:	13.2V ⁽¹⁾	26.4V ⁽¹⁾
Equalization Voltage (if enabled):	15.2V ⁽¹⁾	30.4V ⁽¹⁾
Auxiliary Output (option A, B, or C):	A) Auxiliary Battery Charge 2A (2nd battery) B) Load Control C) Dusk-to-Dawn (by IPN ProRemote)	
Load (LVD) Disconnect/Reconnect Voltage:	11.5V/12.6V ⁽¹⁾	23.0V/25.2V ⁽¹⁾
Maximum Auxiliary Output current (option B or C):	20A	15A
Display LCD:	optional IPN ProRemote or IPN Remote	
Temperature Compensation (by optional Battery Temperature Sensor):	-5.00mV/°C/cell correct factor (Range 0.00 to -8.00mV/°C/cell) ⁽¹⁾	
Operating Temperature:	-40°C - 50°C	
Maximum Full Power Ambient:	50°C	
Environmental Protection:	IP20	
Connection:	Battery and PV terminals #20-10 AWG (tightened 9 in-lb, 1 nm) Auxiliary Output terminals #20-10 AWG (tightened 9 in-lb, 1 nm) IPN Network terminals #24-14 AWG wire (tightened 2.1 in-lb, 0.24 nm)	
Weight:	1.15 lb. (525 g)	
Dimensions:	5.3 x 5.3 x 2.5" (13.5 x 13.5 x 6.35 cm)	
Warranty:	5 years	
Certifications:		

^(*) 36-cell panels are typically referred to as "12V panels" providing Vmp/Voc of -18V/22V at STC, 60-cell panels refers to "20V panels" (Vmp/Voc -30V/37V), 72-cell panels refers to "24V panels" (Vmp/Voc -36V/44V). ⁽¹⁾ Factory default voltages unless programmed with an IPN ProRemote display or UCM.





DC-145 (12V145Ah)

DC (Deep Cycle) series is specially designed for frequent cyclic discharge. By using strong grids and specially designed active material, the DC series battery offers 30% more cyclic life than the standby series. It is suitable for solar energy systems, marine and RV etc.



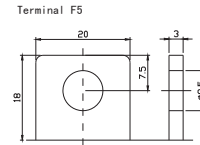
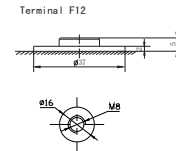
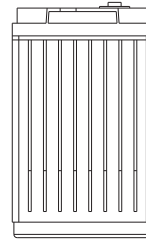
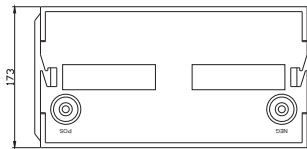
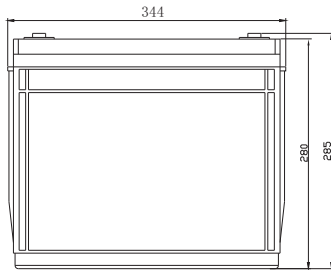
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	145h@10hr-rate, 165h@100hr to 1.80V per cell @25 C
Weight	Approx. 44.0 Kg (Tolerance $\pm 1.5\%$)
Max. Discharge Current	160 A (5 sec)
Internal Resistance	Approx. 4 m Ω
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C \pm 5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current	43.5 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	SLI Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F5/F12
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions

Unit: mm Dimension: 344(L) \times 173(W) \times 285(H)



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	447.0	333.4	263.1	145.7	90.51	55.88	37.97	30.62	25.42	16.74	15.09	7.99
10.0V	434.1	317.3	257.7	143.8	89.30	54.75	37.27	30.18	25.19	16.68	14.94	7.84
10.2V	421.2	306.1	253.6	141.6	88.45	54.17	36.94	29.88	25.03	16.53	14.79	7.69
10.5V	378.2	282.4	241.5	137.7	87.37	53.46	36.61	29.44	24.82	16.38	14.65	7.54
10.8V	341.4	257.5	222.6	133.2	86.15	53.03	36.18	28.43	24.70	16.31	14.51	7.46
11.1V	291.5	230.2	199.6	128.1	84.11	50.89	35.48	28.02	24.52	16.18	14.34	7.16

Constant Power Discharge Characteristics: W (25°C)

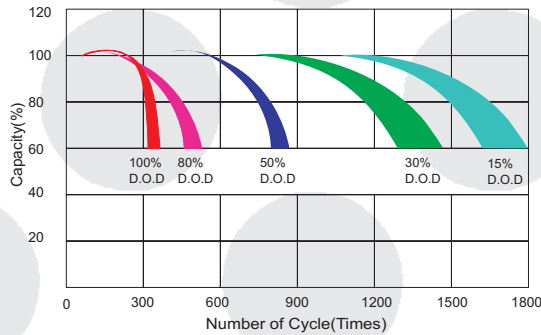
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	4623	3551	2894	1668	1049	654.8	447.1	366.5	304.5	200.5	180.9	96.22
10.0V	4532	3442	2847	1650	1039	646.8	440.4	361.3	301.8	199.7	179.5	94.55
10.2V	4481	3351	2815	1636	1033	642.2	438.5	358.0	299.9	198.2	177.9	92.80
10.5V	4079	3121	2685	1603	1026	634.1	434.9	353.1	297.5	196.5	176.2	91.05
10.8V	3715	2877	2482	1565	1013	629.4	430.0	341.2	296.2	195.7	174.4	90.17
11.1V	3263	2601	2234	1522	998.1	605.8	422.8	336.3	295.1	194.3	172.5	86.95

All mentioned values are average values (Tolerance $\pm 2\%$).

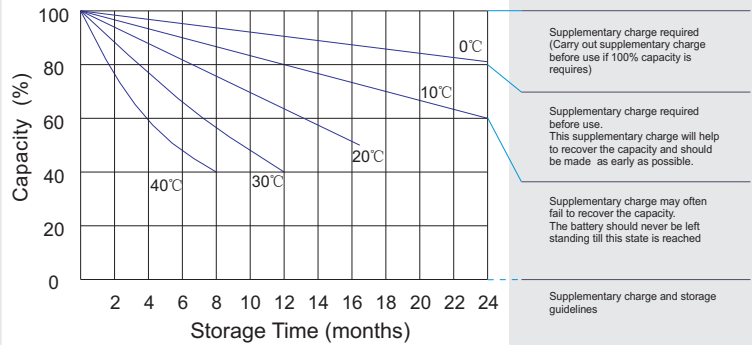
DC-145

12V160Ah

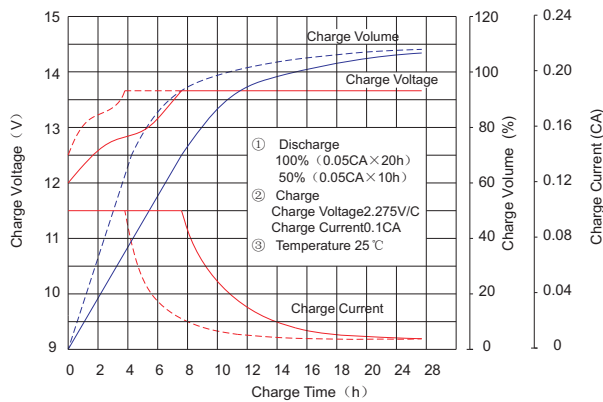
Life characteristics of cyclic use



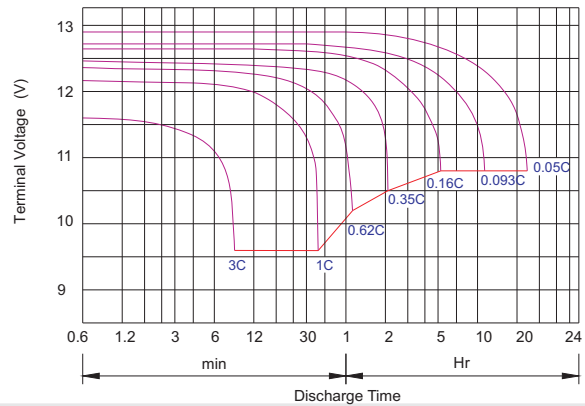
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+14.4-14.7Vx24h, Max. Current 0.3C
Constant Current	-0.2Cx2h+0.1Cx7h+0.05Cx4h
Fast	-0.2Cx2h+0.3Cx3h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N·m	8~10N·m	10~12N·m

Maintenance & Cautions

Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
- Generally speaking, the most important factors is depth of discharge.

QY Frame - Miniature Circuit Breakers

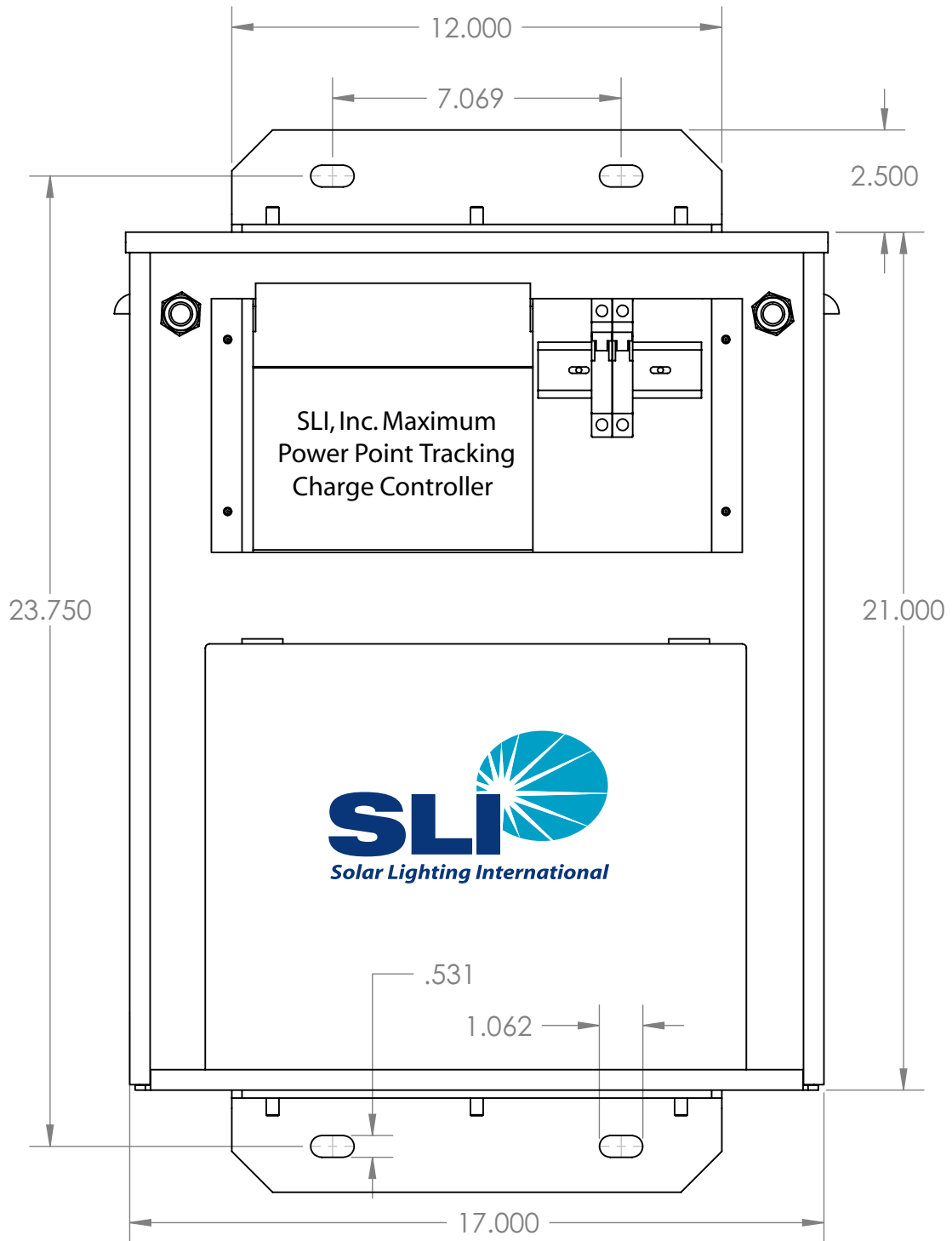


Features:

- Hydraulic-magnetic technology ensures reduced nuisance tripping with temperature variance
- Always hold 100% rated current
- Wide range of time delays & operating currents
- Current limiting capabilities
- Ultra compact - 13 mm width module
- Din, Mini-rail or Dual mountable

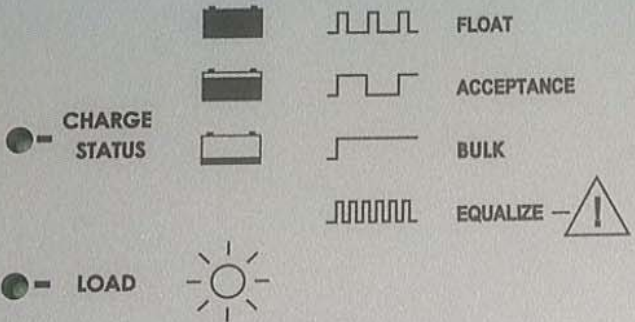
Poles:	1, 2
Max. Voltage:	80 VDC
Max. Interrupting Capacity:	10 kA
Current Rating:	1 A to 100 A
Agency recognition of Approvals:	IEC 60947-2 UL 489A SANS VC8036





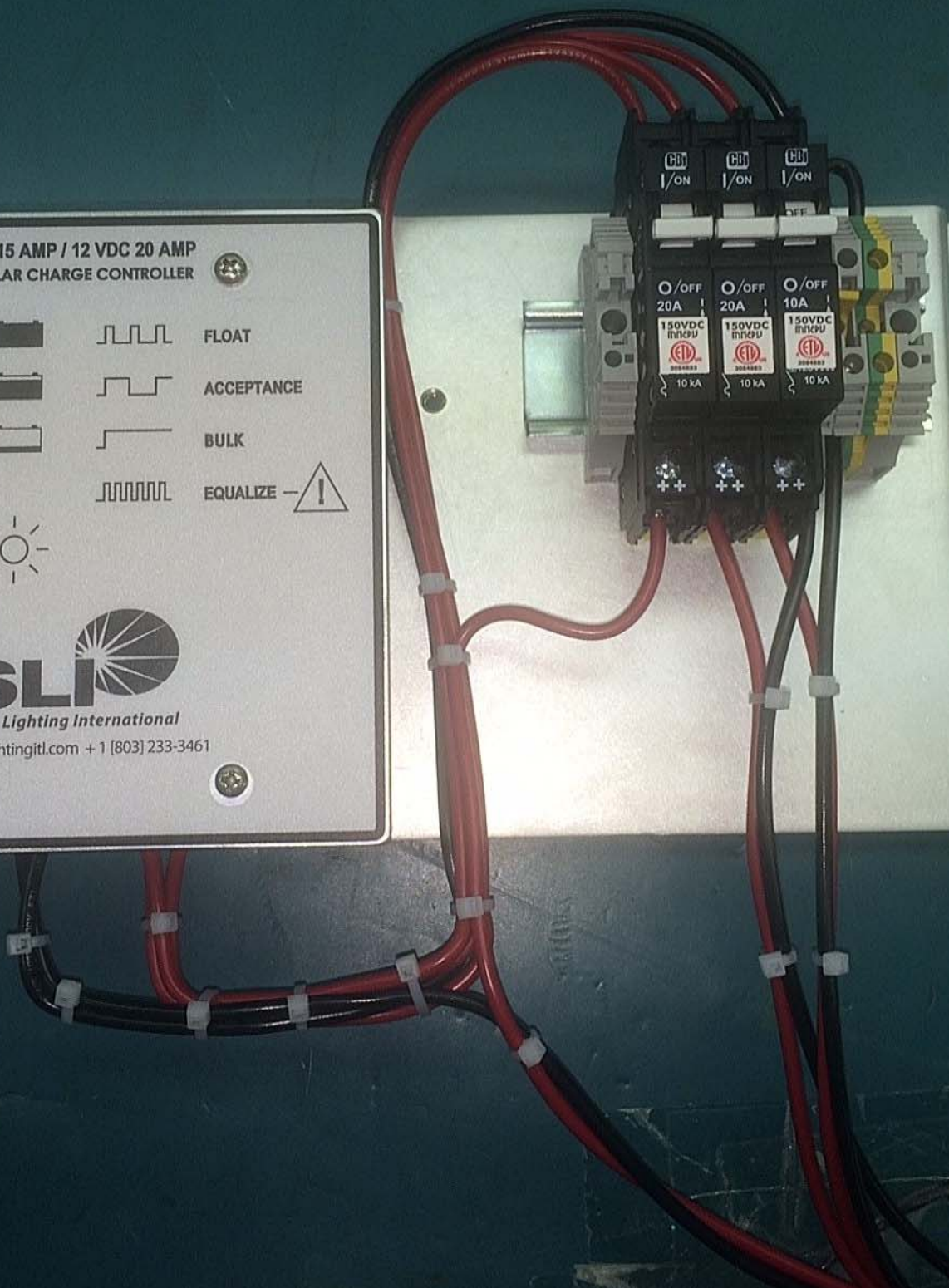
Solar Lighting International, Inc. Lancaster, SC 29720
 Phone +1 803-233-3461 Fax +1 803-233-2096 www.solarlightingitl.com

24 VDC 15 AMP / 12 VDC 20 AMP
MPPT SOLAR CHARGE CONTROLLER



www.solarlightingintl.com +1 [803] 233-3461

Terminal block with three relays and fuses. Each relay is labeled with "O/OFF" and "I/ON" positions. The fuses are labeled "150VDC 10kA".





CERTIFICATE



This is to certify that

Custom Manufacturing Services, Inc.

142 Brick Street
Princeton, WV 24740
United States of America

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**.

Scope:

The provision of custom metal fabrication and systems level integration of electro-mechanical assembly.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate registration no.	10000410 QM08
Date of original certification	1995-02-27
Date of certification	2015-07-17
Valid until	2018-07-16

UL DQS Inc.

Ganesh Rao
Managing Director





**Annex to Certificate
Registration No. 10000410 QM08**

Custom Manufacturing Services, Inc.

142 Brick Street
Princeton, WV 24740
United States of America



Extended Location

Scope

**10002998
Custom Manufacturing Services, Inc.
400 Rogers Street
Princeton, WV 24740
United States of America**

The off-site at 400 Rogers Street, Princeton, WV performs the following primary functions: metal fabrication and assembly.



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