

# DH60A-LI-R/W(T)

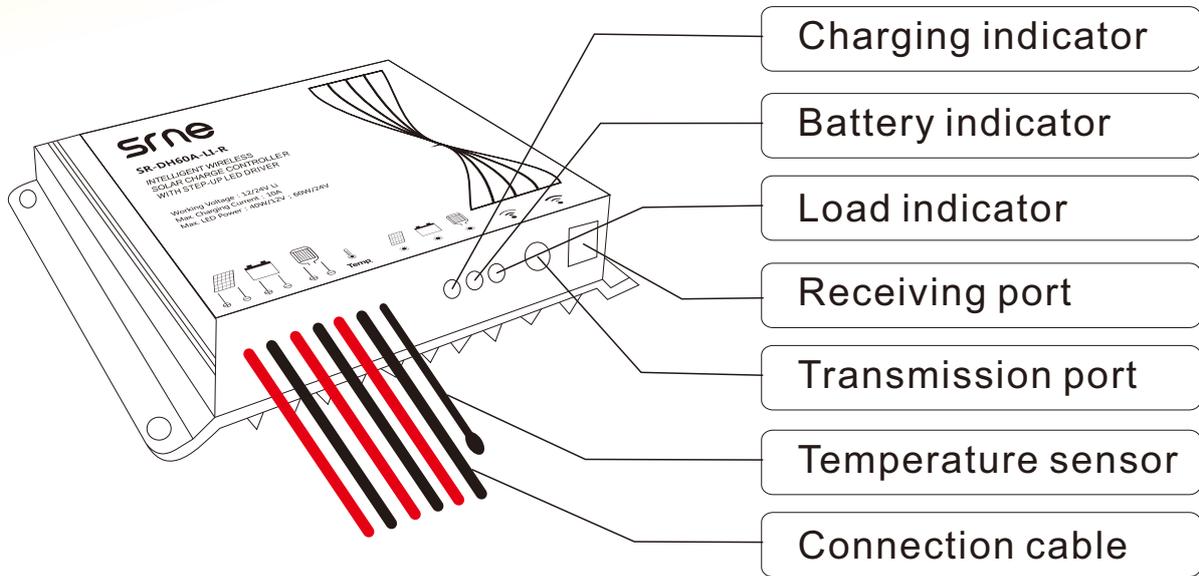
## Lithium Battery Intelligent Wireless Dimming-Type Controller for LED Solar Street Lights



### Main Features

1. Dedicated controller for lithium batteries, applicable to ternary-material lithium, lithium iron phosphate, lithium cobalt oxide and other types of lithium batteries.
2. Features a unique lithium battery auto-activation function.
3. A wireless remote control function allows an adjustable remote control distance of 0.3 to 20m, with the signal able to penetrate plastic or aluminum shells. (DH60A-LI-W)
4. Adopts a highly efficient constant-voltage and limited-current mode for lithium battery charging.
5. Boasts a high-temperature protection function. When the temperature rises above the set value, the charging and discharging circuits will be cut off so as to protect the lithium battery.
6. Also features a low-temperature charging protection function. When the temperature drops below the set value, the charging circuit will be cut off so as to avoid irreversible inner short circuit damage to the lithium battery.
7. An all-new 10-stage load control mechanism renders load management more intelligent, energy-saving and flexible.
8. Boasts an operating duration adjustment precision of 1 minute and a load power adjustment precision of 1%.
9. An all-new intelligent power algorithm provides 3 optional intelligent power levels. The user
10. can adjust the energy-saving level for the load based on battery voltage platform characteristics and the energy management method to realize an optimized balance between load brightness and operating duration.
11. Digital and high-precision constant-current control boasts an efficiency of up to 96%, and the current adjustment precision reaches 10mA.
12. Features a system status log function, able to record a maximum of 7 days of system status, comprehensively and effectively monitoring the system's conditions.
13. An IP68 grade waterproof aluminum shell guarantees excellent heat dissipation and superb security.
14. A range of protection measures such as battery reverse-connection protection, LED short-circuit and open-circuit protection, etc., put the system under comprehensive and constant guard.

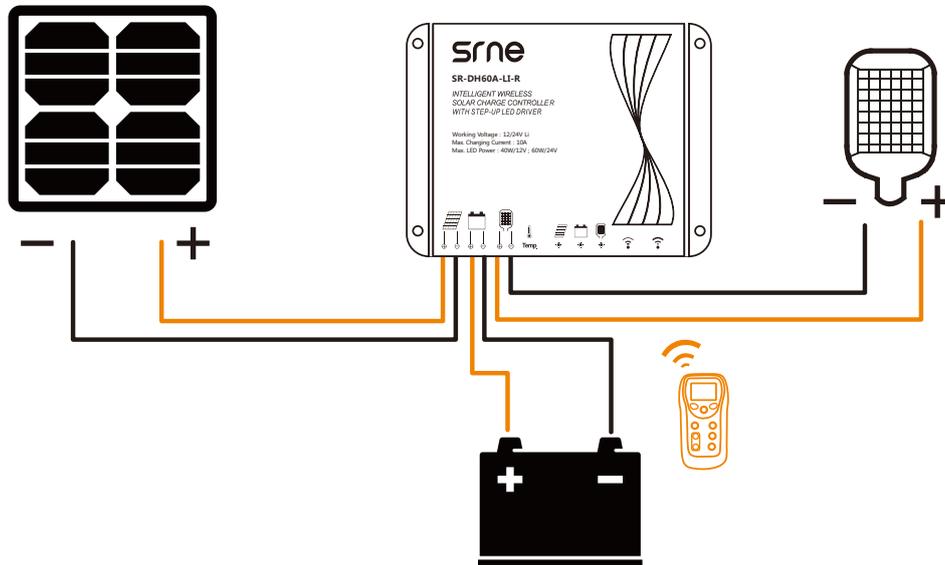
# Exterior



# Product detail figure



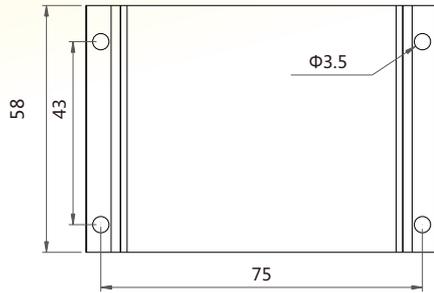
# Wiring



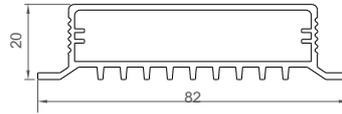
# State Indicators

LED indicator	Indicated item	State	Meaning
	Charging	Steady on	Solar panel voltage higher than light control voltage
		Off	Solar panel voltage lower than light control voltage
		Slow flashing	Charging in process
		Quick flashing	System over-voltage
	Battery	Steady on	Normal battery function
		Off	Battery not connected
		Quick flashing	Battery over discharged
	Load	Steady on	Load turned on
		Slow flashing	Open-circuit LED load
		Quick flashing	Short-circuited LED load
		Off	Load turned off

# Installation Dimensions



Dimensions of DH60A-LI-R/W are as follows:  
 External dimensions: 82×58×20 (mm)  
 Installation dimensions: 43×75 (mm)  
 Installation hole diameter: 3.5 (mm)



# Parameter Details

Parameter	Value		Adjustable or not	Default
Model	DH60A-LI-R	DH60A-LI-W		
Remote control mode	Infrared remote control	Wireless remote control		
System voltage	12V/24V			
Output power	40W/12V;60W/24V			
Output current	0.15A ~ 2.64A		√	330mA
No-load loss	13mA/12V; 21mA / 24V	14mA/12V; 22mA/24V		
Wireless remote control distance	5 to 10m (typical)	0.1 to 20m (adjustable)		
Charging current	10A			
Solar energy input voltage	< 55V			
Typical constant-current source efficiency	90% ~ 96%			
Operating stages	9 stages + morning on		√	
Time adjustment precision	1 minute			
Power adjustment precision	1%			
Current adjustment precision	10mA			
Over-voltage protection	Overcharge voltage + 2V; × 2/24V			16.6V
Charging voltage limit	Overcharge voltage + 1V; × 2/24V			15.6V
Overcharge voltage	9.0V ~ 17.0V ; ×2/24V		√	14.6V
Overcharge return voltage	9.0V ~ 17.0V ; ×2/24V		√	13.6V
Over-discharge voltage	9.0V ~ 17.0V ; ×2/24V		√	10.0V
Over-discharge return voltage	9.0V ~ 17.0V ; ×2/24V		√	12.0V
Current accuracy	±3% (load current > 300mA)			
Load output voltage	< 60V			
Light control voltage	5V ~ 11V		√	5V
Light control delay	0min ~ 60min		√	1min
Operating temperature	-35°C ~ +65°C ;		√	
High-temperature operation	40°C ~ +90°C ;		√	65°C
Low-temperature charging	0°C ~ -40°C ;		√	Yes
Intelligent power	High, medium and low		√	Medium
Sleep function	Yes			
Sleep wake-up function	1. Wakes up when the solar panel gets charged; 2. Wakes up when the "Test" key on the remote control is pressed			
Protection degree	IP68			
Weight	170g			
Dimensions (mm)	58*82*20			