

Win-K

MPPT Solar charge controller



Overview

Win series solar controller is based on an advanced maximum power point tracking (MPPT) technology developed, dedicated to the solar system, the controller conversion efficiency up to 98%.

The controller can rapidly track the maximum power point(MPP) of PV array to obtain the maximum energy of the panel, especially in case of a clouded sky, when light intensity is changing continuously, an ultra fast MPPT controller will improve energy harvest by up to 30% compared to PWM charge controllers.

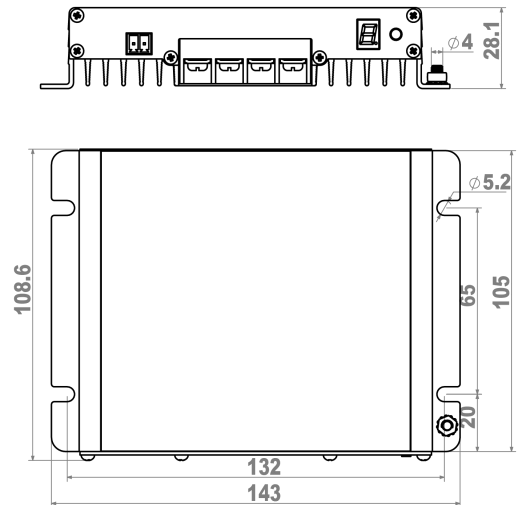
- Innovative Max Power Point Tracking(MPPT) technology, tracking efficiency >99.9%
- Full digital technology, high charge conversion efficiency up to 98%
- LED indicator for easy to read charging state and battery information
- 12/24V automatic recognition
- Liquid, Gel, AGM and Lithium battery for selection
- The separate ports for remote temperature sensor, make battery temperature compensation more accurate
- Four stages charge way: MPPT, boost, equalization, float
- Automatic over-temperature power reduction function
- Dual automatic restriction function when exceeding rated charging power and charging current
- IOS and Android APP version for Bluetooth communication(selectable)
- Common negative design
- LED segments displays,make battery selection easy
- Perfect EMC & thermal design
- Full automatic electronic protect function



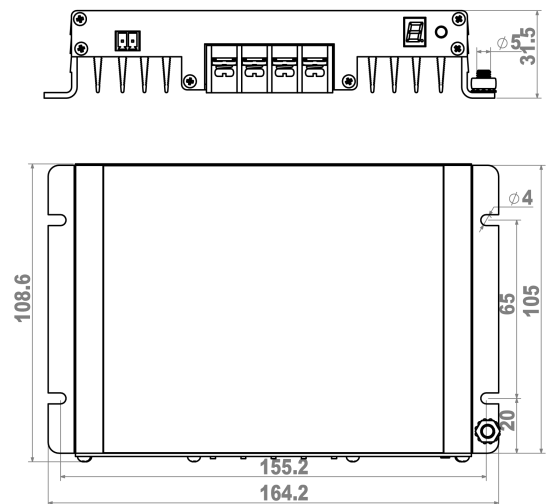
Dimensions

Unit:mm

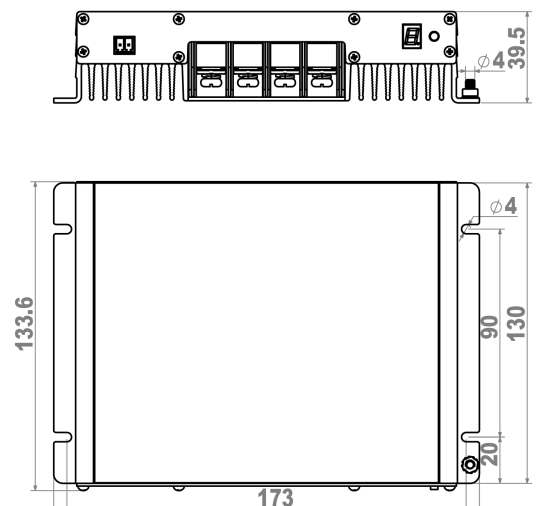
Win1575-K



Win2075-K

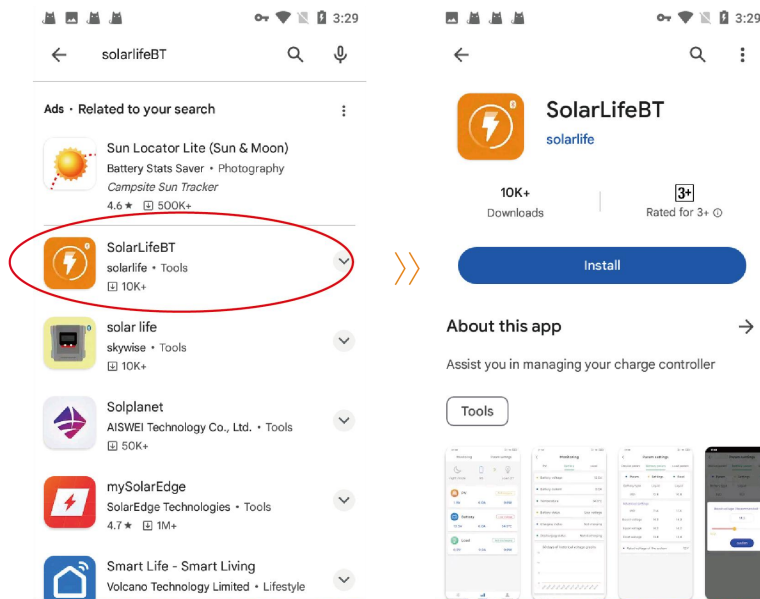


Win40100-K

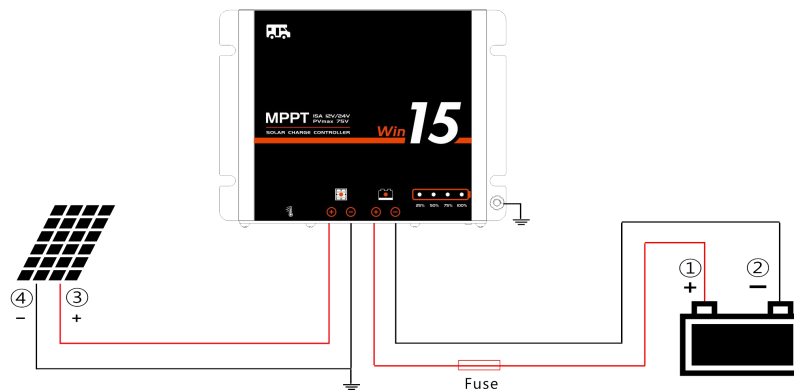
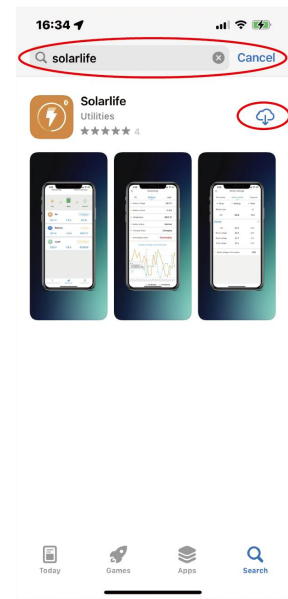


APP download

For Android Phone, download “SolarLifeBT”
in Google Play Store.



For iPhone, download “Solarlife”
in Apple APP Store.



Technical Data

	Item	Win1575-K	Win2075-K	Win40100-K	Win60100-K
Battery Parameters	Battery type	Gel, AGM, Liquid, Lithium (default: Gel)			
	System voltage	12/24V automatical recognition			
	Max charging current	15A	20A	40A	60A
	MPPT charging voltage	< 14.5/29.0V@25°C			
	Boost voltage	14.0~14.8V/28.0~29.6V (default:14.5/29.0V@25°C)			
	Equalization voltage	14.0~15.0V/28.0~30.0V (default:14.8/29.6V@25°C)			
	Float voltage	13.0~14.5V/26.0~29.0V (default:13.7/27.4V@25°C)			
	Low voltage disconnect	10.8~11.8V/21.6~23.6V (default: 11.2/22.4V)			
	Low voltage reconnect	11.4~12.8V/22.8~25.6V (default: 12.0/24.0V)			
	Battery high voltage protection voltage	15.8/31.3V(Liquid,GEL,AGM)			
	Temperature compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)			
	Charging target voltage	10.0~32.0V (Lithium, default: 14.4/28.8V)			
	Charging recovery voltage	9.2~31.8V (Lithium, default: 14.0/28.0V)			
	Low voltage disconnect	9.0~30.0V (Lithium, default: 11.0/22.0V)			
	Low voltage reconnect	9.6~31.0V (Lithium, default: 12.0/24.0V)			
Panel Parameters	Max volt on bat. terminal	35V			
	Max voltage on PV	75V*1		95V	100V
	Max input power	200/400W	260W/520W	520/1040W	800W/1600W
	MPPT tracking range	(Battery Voltage+1.0V) ~Voc*0.9 *2			
	Max conversion efficiency	97%			
System Parameters	Dimensions	108.6*143*28.1mm	108.6*164.2*31.5mm	133.6*184.5*39.5mm	190*230*50.2mm
	Weight	557g	706g	1330g	2863g
	Communication	BLE(Selectable)			
	Grounding	Laser engraving and silk screen printing			
	Power terminals	10AWG (5mm ²)		8AWG(10mm ²)	6AWG (16mm ²)
	Ambient temperature	-20~+55°C			
	Storage temperature	-40~+80°C			
	Ambient humidity	0~100%RH			
	Protection degree	IP54			

*1.This value represents the maximum voltage of the solar panel at the minimum operating ambient temperature

*2.Voc means the open circuit voltage of the solar panel

*3.Around oblique line value separately on behalf of 12V and 24V system's value