



## MPPT SOLAR CONTROLLER & ACCESSORIES

The HULK Professional Series Solar Charge Controllers offer efficient solar power management and reliable performance for all types of charging needs.



The HULK Professional Series Solar Charge Controller range offers both PWM and MPPT controllers. The PWM controllers are available in 30 Amp and 60 Amp configurations and feature a built-in LCD display, multiple load control modes, and high-quality components for enhanced durability. They also have extensive electronic protection and support various battery types.

The MPPT controllers utilise an advanced algorithm for maximum power point tracking and are available in 20 Amp and 40 Amp configurations. They have increased energy utilisation compared to PWM charging and offer self-adaptive three-stage charging and comprehensive electronic protection. The MPPT controllers are suitable for various applications and offer programmable temperature compensation and real-time energy statistics.

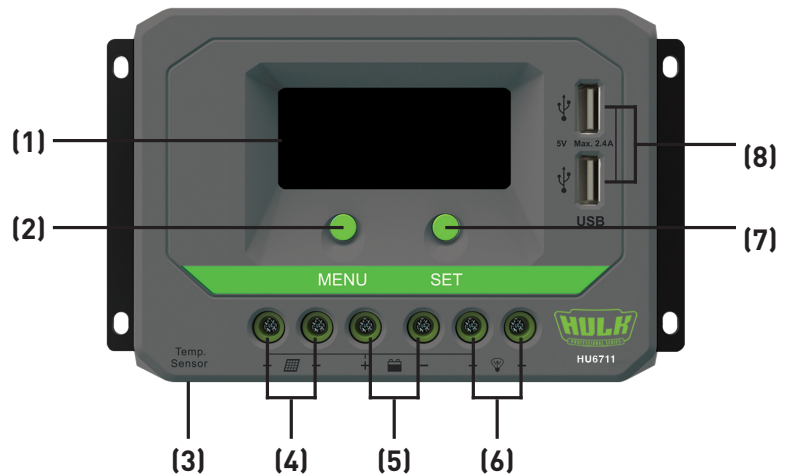
# PWM SOLAR CHARGE CONTROLLER

## Overview

The HULK Professional Series PWM (Pulse Width Modulation) Solar Charge Controller, is available in 30 Amp and 60 Amp configurations.

## Features

- Utilises high-quality components from ST, IR, and Infineon for extended product lifespan
- UL and VDE certified terminals ensure safety and reliability
- Can operate continuously at full load within a temperature range of -25 to 55°C
- 3-Stage intelligent PWM charging mechanism for efficient charging
- Supports 3 charging options: Sealed, Gel, and Flooded batteries
- Provides extensive electronic protection for enhanced safety
- Backlit LCD display shows operating data and working conditions in real time
- Dual USB ports with 2.4A output for charging electronic devices
- Multiple load control modes for versatility
- Energy statistics function for monitoring power usage
- Battery temperature compensation for improved performance



(1) LCD	(5) Battery Terminals
(2) MENU Button	(6) Load Terminals
(3) RTS Port	(7) SET Button
(4) PV Terminals	(8) USB Output Ports

USB Output Ports provide the power supply of 5VDC/2.4A and have the short circuit protection

Additional features include selectable battery type, and compatibility with 12V, 24V, 36V, and 48V systems. The controller also offers electronic protections against various faults, including reverse polarity, overvoltage, over discharge, short circuit, overload, and overheating.

**Part Number: HU6711 (30A)**

**Part Number: HU6712 (60A)**

## Technical Specifications

	HU6711	HU6712
Rated Charge/Discharge Current	30A @ 55°C	60A @ 55°C
Nominal system voltage	12/24/36/48VDC Auto	
Battery input voltage range	9V-64V	
Max. PV Open circuit voltage	96V	
Battery Type	Sealed(Default) / Gel / Flooded	
Equalize Charging Voltage*	Sealed:14.6V/ Gel: No/ Flooded:14.8V	
Boost Charging Voltage*	Sealed:14.4V/ Gel:14.2V/ Flooded:14.6V	
Float Charging Voltage*	Sealed/Gel/Flooded:13.8V	
Low Voltage Reconnect Voltage*	Sealed/Gel/Flooded:12.6V	
Low Voltage Disconnect Voltage*	Sealed/Gel/Flooded:11.1V	
Self-Consumption	≤9.2mA/12V; ≤11.7mA/24V; ≤14.5mA/36V; ≤17mA/48V	
Charge circuit voltage drop	≤0.29V	
Discharge circuit voltage drop	≤0.16V	
LCD Temperature range	-20°C to 70°C	
Relative Humidity	≤95%, N.C.	
Enclosure	IP30	
Grounding	Common Positive	
USB output	5VDC/2.4A (Total)	
Temperature Compensation Coefficient	-3mV/°C/2V [25°C]	
Working Environment Temperature	-25°C to 55°C (product can work continuously at full load)	
Dimensions	181x100.9x59.8mm	214x128.7x72.2mm
Mounting & Hole Size	172x80mm & Ø5	205x100mm & Ø5
Terminals	16mm <sup>2</sup> /6AWG	25mm <sup>2</sup> /4AWG
Net weight	0.58kg	1.04kg

\* The above parameters are in the 12V system at 25°C, twice in the 24V system, triple in the 36V system and quadruple in the 48V in system.

# MPPT SOLAR CHARGE CONTROLLERS

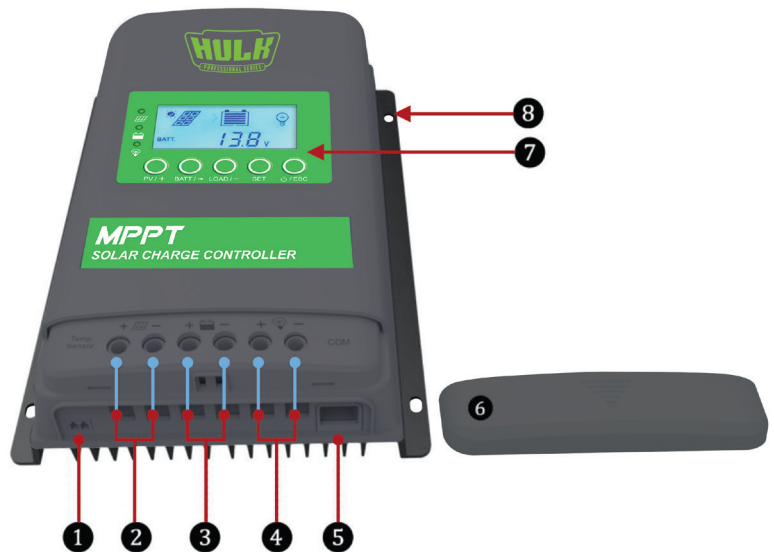
## Overview

The HULK Professional Series Solar Controller utilises advanced MPPT control algorithm to maximise the energy from your solar array under any conditions. Compared to the PWM charging method, it can increase the ratio of energy utilisation by 20% - 30%. In high-temperature environments, the controller limits the charging power and current, and reduces charging power functions to ensure stability in high-temperature environments. CE certified with IP33 ingress protection and isolated RS485 design, it offers improved reliability and meets diverse application requirements.

Equipped with a self-adaptive three-stage charging mode, this controller prolongs battery lifespan and improves system performance. Comprehensive electronic protection safeguards against overcharge, over-discharge, PV & battery reverse polarity, and more, ensuring a reliable and durable solar system.

## Features

- 100% charging and discharging in the working temperature range
- High-quality components from ST or IR for extended service life
- Advanced Ultra-Fast Tracking MPPT technology ensures up to 99.5% tracking efficiency
- Maximum DC/DC transfer efficiency up to 98.5%; full load efficiency up to 97.2%
- Accurate recognition and tracking of multi-peaks maximum power point
- Wide MPP operating voltage range
- Supports lead-acid and lithium batteries with adjustable voltage parameters
- Programmable temperature compensation
- Limit charging power and current overrated value
- Real-time energy statistics
- Overheating power reduction function
- Multiple load work modes
- Isolated RS485 with 5V/200mA protected output for no power devices, with Modbus protocol
- Supports monitoring and parameter setting via app or PC software



[1] RTS Port	[5] RS485 Communication Port
[2] PV Terminals	[6] Terminal Protection Cover
[3] Battery Terminals	[7] Display Units
[4] Load Terminals	[8] Mounting Hole $\Phi$ 5mm

**Part Number: HU6714 (20A)**

**Part Number: HU6715 (40A)**

## Technical Specifications

	HU6714	HU6715
System nominal voltage	12/24VDC Auto	
Rated charge current	20A	40A
Rated discharge current		
Battery voltage range	8 ~ 32V	
Max. PV open circuit voltage	100V <sup>②</sup> 92V <sup>③</sup>	
MPP voltage range	[Battery voltage +2V] ~ 72V	
Rated charge power	260W/12V 520W/24V	520W/12V 1040W/24V
Max. conversion efficiency	98.3%	98.6%
Full load efficiency	96.4%	96.5%
Self-consumption	≤30mA (12V) ≤16mA (24V)	
Discharge circuit voltage drop	≤0.23V	
Temperature compensate coefficient	-3mV/°C/2V (Default)	
Grounding	Common negative	
RS485 interface	5VDC/200mA(RJ45)	
LCD backlight time	Default:60S,Range:0~999S (0S:the backlight is ON all the time)	

## Solar Controller Accessories



HU6740-B

HU6740-W

### ABS Solar Cable Dual Entry Point

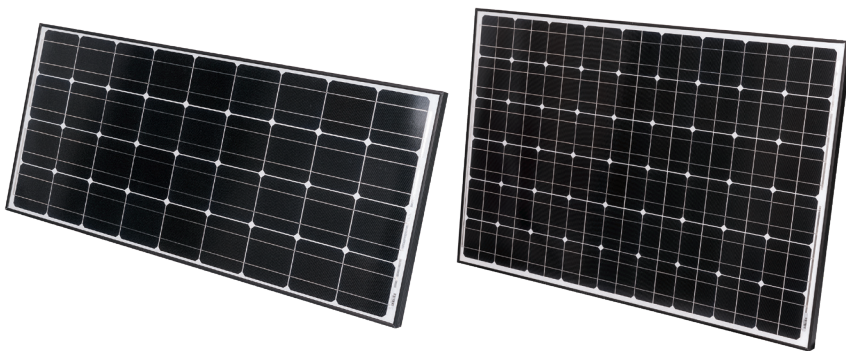
L:100mm x W:85mm x H:50mm  
2 x 9mm Entry Glands & 1 x Block Off  
IP67 Rating



### Solar Panel Mounting Brackets

4 pack, Aluminium, comes with screws

## Compatible with the HULK Professional Series Solar Panels, Pure Sine Inverter and Lithium Battery range!



HU6700, HU6701, HU6702, HU6704



HU6580, HU6581, HU6582, HU6583,  
HU6585, HU6587, HU6588



HU6491

HU6494

HU6490