

SOLAR-CMP40AN

40A MPPT Solar Charge Controller with RS485 Remote Control and Cloud Access



SOLAR-CMP40AN is Linovision's new generation of MPPT solar charge/discharge controller, optimized for solar trailers, RV and outdoor applications. It features adaptive 3-stage charging mode, which can maximize the use of PV power and prolong the battery life. It also includes a constant voltage output function, ensuring comprehensive and user-friendly compatibility with various lithium batteries. Under certain conditions, the PV system can directly power loads without a battery. Its excellent low power consumption design significantly reduces standby power, extending system standby time.

Outstanding Features

- Constant voltage output function
- Maximum DC/DC conversion efficiency of 98%
- Advanced MPPT technology, with Max. tracking efficiency higher than 99.5%
- Supports multi battery types, including Lead acid AGM batteries, Gel batteries, LiFePO4 batteries and other Lithium batteries.
- Battery temperature compensation;
- Stable self-activation function
- LCD screen for battery parameter setting
- Comprehensive electronic protection
- Self-consumption lower than 10mA
- Multiple load work modes
- Parameter setting via the PC software, APP, or remote meter
- RS485 communication output, works with IOT-R51W, IOT-R32W, IOT-C101 and other RS485 gateways for remote monitoring and control.

Specification

SOLAR-CMP40AN	
Electrical Parameters	
Battery Rated Voltage	12/24V DC (Auto-Recognition)
Rated Charging Current	40A
Rated Discharge Current	40A
Controller Work Voltage Range	8 to 31V
PV Max.Open-circuit Voltage	92V/25°C (92V/77°F)
MPPT Voltage Range	(Battery voltage +2V)~72V
Rated Charging Power	520W/12V
	1040W/24V
Static Losses	≤8mA(12V)
	≤5mA(24V)
Discharge-circuit Voltage Drop	≤0.23V
Default Temperature Compensation	-27mV/°F/2V(-3mV/°C/2V)
Default LCD Backlight Time	60S, Range:0~999S (0 seconds: the backlight is ON all the time)
Environmental parameters	
Work Temperature Range	-13°F to +113°F(-25°C to +45°C)(100% loads working)
Storage Temperature Range	-4°F to +158°F(-20°C to +70°C)
Relative Humidity	< 95% (N.C.)
Enclosure	IP30
Dimension (L x W x H)	9.92×7.08×2.48"(252×180×63mm)
Mounting Size (L x W)	8.03×6.73"(204×171mm)
Mounting Hole Size	Φ0.196"(Φ5mm)
Terminal	6AWG(16mm ²)
Recommended Wire Size	6AWG(16mm ²)
Net Weight	3.63lb(1.65kg)

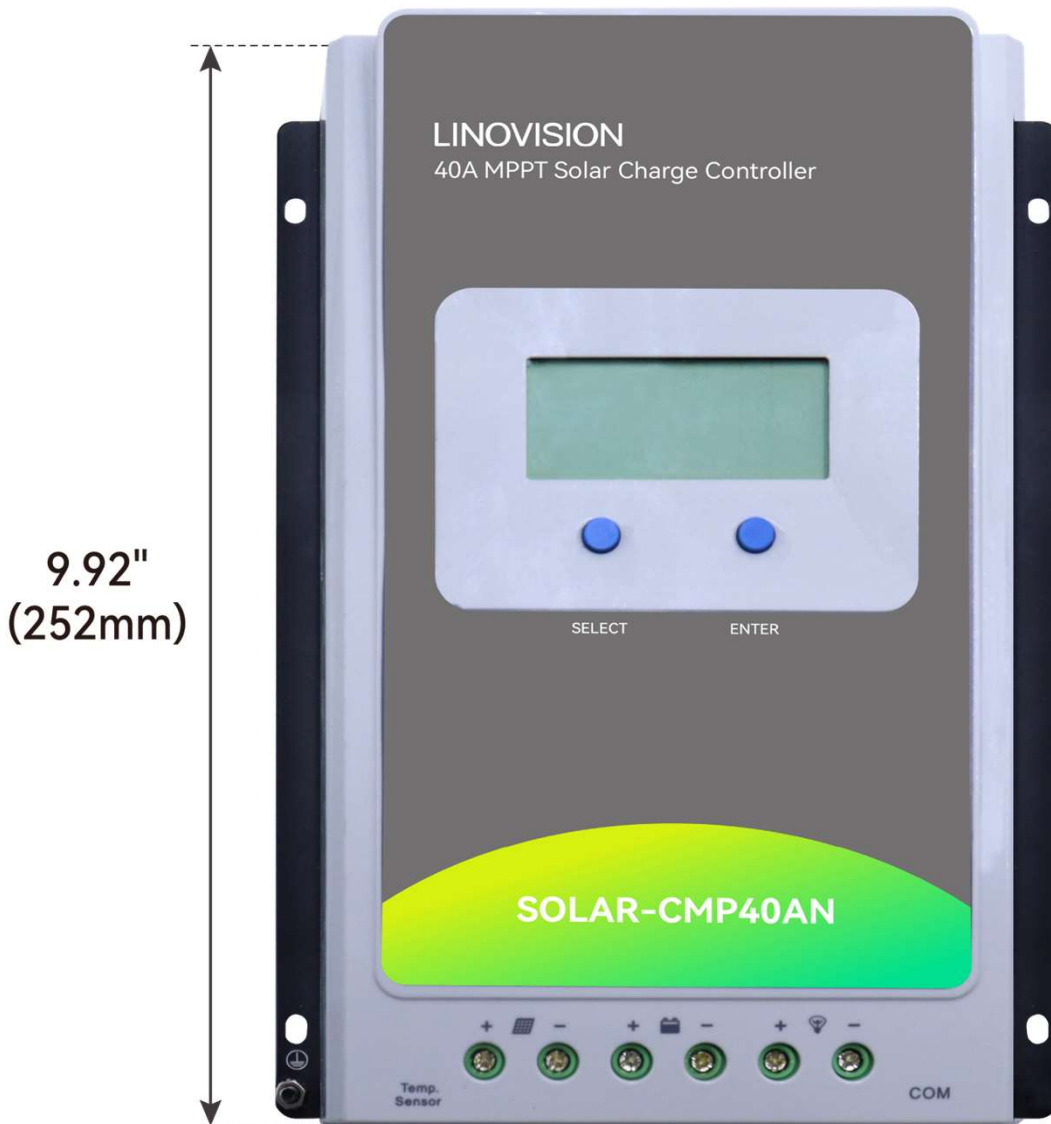
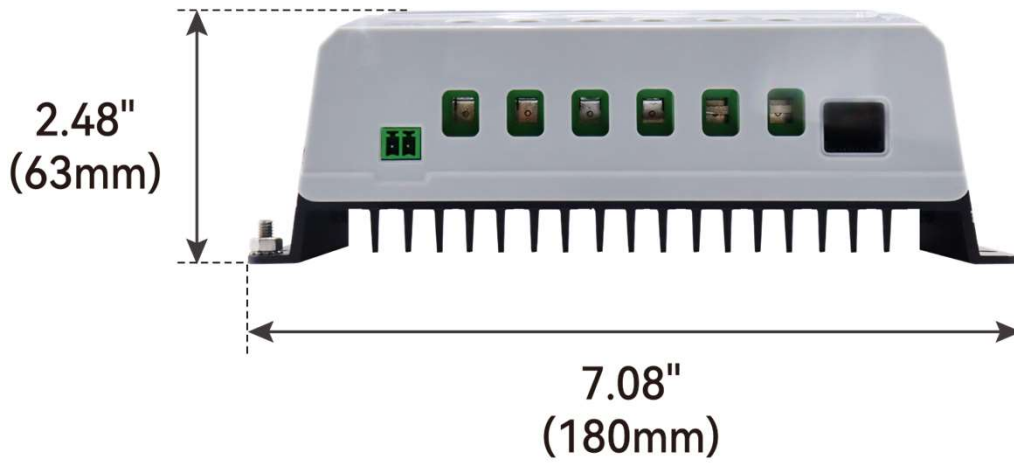
Interface



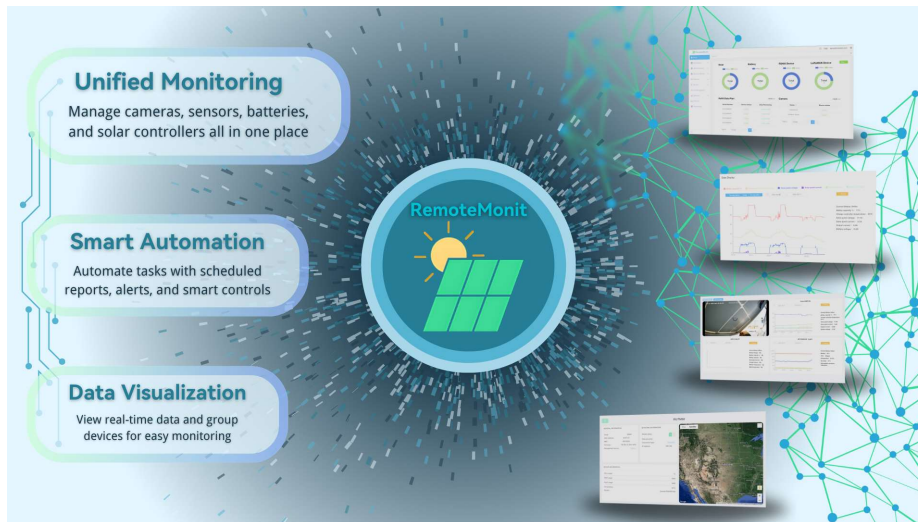
Figure 1-1 Product Characteristics

①	SELECT button	⑥	RS485 port (no isolation)
②	RTS interface	⑦	Mounting Hole Φ5mm
③	PV Terminals	⑧	ENTER button
④	Battery terminals	⑨	LCD
⑤	Load terminals		

Dimension



Cloud Platform Accessories



IOT-C101

Dual Ports Serial Server

RS485 and RS232 to RJ45 Converter

- Integrate your SOLAR-CMP40AN and RS485 devices with Ethernet
- Wall and rail mountable, IP30 protection, wide operating temperature from -40°F to 185°F



IOT-R51W

Virtual SIM 4G Cellular Router

Industrial 4G LTE Cellular Router

- Virtual SIM free technology without physical SIM
- Various and affordable data plan options
- Global coverage including USA, Canada, UK, Europe, Japan and so on



IOT-R32W

Industrial 4G Cellular Router

4G LTE CAT4 ROUTER

- Dual SIM card slots, backup between two cellular network
- Ensure highly reliable connectivity by automatic failover among local LAN, cellular and WiFi networks
- Industrial design for harsh environment