Max-EU series

Solar charge controller

Max20-EU
Max30-EU
Max40-EU
Max-6048E

- 12/24/36/48V automatic recognition
- Real-time energy statistics function
- Two USB interfaces (Max20/30/40-EU)
- Perfect EMC & thermal design
- Full automatic electronic protect function

Cyber-USB

Cyber-BT

Max60-E series controllers can be connected to the Cyber-BT(bluetooth) via the RJ11 interface.

Cyber-BT is a kind of serial adpter which can make our company's solar controller be with bluetooth communication function, and carry out wireless monitoring, parameter setting, and etc. for the system only by cooperating with mobile phone APP.

Overview

With your new Max-E series solar charge controller you own a state-of-the art device which was developed according to the latest available technical standards.
It comes with a number of outstanding features, such as:

- LCD display design, read operating data and working condition easily
- Flexible System battery selection: Liquid, Gel, AGM and Lithium
- Extends battery life through accurate remote temperature sensor
- Controller is protected against over-temperature due to built-in power reduction function
- Four stages battery charging process: fast, boost, equalization, float
- Multiple load control modes: Always on, Street lamp, User-defind Mode
- IoT wireless communication or Bluetooth communication functions optional (Max6048-E)
- Based RS-485 standard Modbus protocol with RJ11 interface to maximize the communication needs of different occasions (Max6048-E)
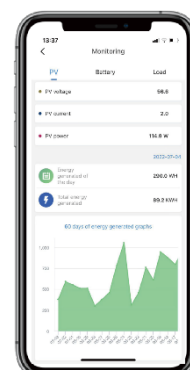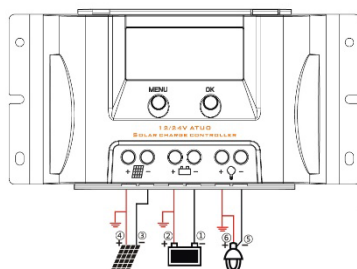
Technical Data

	Item	Max20-EU	Max30-EU	Max40-EU
Battery Parameters	Max Charging Current	20A	30A	40A
	System Voltage	12/24V automatic recognition		
	Max volt on Bat. terminal	35V		
	Battery Type	Gel, AGM, Liquid, Lithium(default: Gel)		
	Gel, AGM, Liquid — Fast Charging Voltage	before boost or equalization charging stage		
	Gel, AGM, Liquid — Boost Voltage	14.5/29.0V @25℃		
	Gel, AGM, Liquid — Equalization Voltage	14.8/29.6V @25℃ (Liquid, AGM)		
	Gel, AGM, Liquid — Float Voltage	13.7/27.4V @25℃		
	Gel, AGM, Liquid — Low Volt. Disconnect	10.8~11.8V/21.6~23.6V(default: 11.2/22.4V)		
	Gel, AGM, Liquid — Overcharge Protect	15.8/31.3V		
	Gel, AGM, Liquid — Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)		
	Lithium — Charging target voltage	10.1~32.0V(Lithium, default: 14.4V)		
	Lithium — Low voltage disconnect	9.0~30.0V(Lithium, default: 10.6V)		
Panel Parameters	Max volt on PV terminal *1	25V/50V		
	Dusk/Dawn detect volt.	8.0/16.0V		
Load Parameters	Output Current	20A	30A	40A
	Load mode	Always on(Default) , Street lamp, User-defind Mode		
System Parameters	Dimensions	189*96*53mm		
	Weight	420g		
	Self consumption	8mA/12mA		
	Grounding	Common Positive		
	Power terminals	8AWG(10mm²)		
	Ambient temperature	-20~+50℃		
	Storage temperature	-25~+80℃		
	Ambient humidity	0~100%RH		
	Protection degree	IP32		
	Max Altitude	4000m		

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

Technical Data

Item	Max6048-E		
Battery Parameters	Max Charging Current		60A
	System Voltage		12/24/36/48V automatic recognition
	Max volt on Bat. terminal		65V
	Battery Type		Gel, AGM, Liquid, Lithium (default: Gel)
	Gel, AGM, Liquid	Fast Charging Voltage	before boost or equalization charging stage
		Boost Voltage	14~14.8/28~29.6/42~44.4/56~59.2V@25℃(default:14.5/29/43.5/58V)
		Equalization Voltage	14~15/28~30/42~45/56~60V@25℃(default:14.8/29.6/44.4/59.2V)(Liquid, AGM)
		Float Voltage	13~14.5/26~29/39~43.5/52~58V@25℃(default:13.7/27.4/41.1/54.8V)
		Low Volt. Disconnect	10.8~11.8/21.6~23.6/32.4~35.4/43.2~47.2V(default:11.2/22.4/33.6/44.8V)
		Reconnect Voltage	11.4~12.8/22.8~25.6/34.2~38.4/45.6~51.2V(default:12/24/36/48V)
		Overcharge Protect	15.8/31.3/46.8/62.3V
		Temp. Compensation	-4.17mV/K per cell (Boost, Equalization), -3.33mV/K per cell (Float)
	Lithium	Charging target voltage	11.0~64.0V(Lithium, default: 14.4V)
		Charging recovery voltage	9.2~63.8V(Lithium, default: 14.0V)
		Low voltage disconnect	9.0~60.0V(Lithium, default: 10.6V)
		Low voltage reconnect	9.6~62.0V(Lithium, default: 12.0V)
Panel Parameters	Max volt on PV terminal *1		25V/50V/75V/100V
	Day/Night threshold		Lithium: 3.0~40.0V Gel, AGM and Liquid: 3~10/6~20/9~30/12~40V
	Day/Night delay Time		0~30min
Load Parameters	Output Current		30A
	Load mode		Always on(Default) , Street lamp, User-defind Mode
System Parameters	Dimensions		138*187.5*88.5mm
	Weight		1.1Kg
	Self consumption		10mA (12/24V); 7mA (36/48V)
	Communication		RS485(RJ11 interface)
	Optional		Cyber-BT
	Grounding		Common Positive
	Power terminals		6AWG(16mm2)
	Ambient temperature		-20~+55℃
	Storage temperature		-25~+80℃
	Ambient humidity		0~100%RH
	Protection degree		IP32
	Max Altitude		4000m

*1. Maximum solar panel voltage at minimum ambient operating temperature

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