

BEIJING EPSOLAR TECHNOLOGY CO., LTD. Tel:86-10-82894112

BEIJING EPSOLAR TECHNOLOGY CO., LTD. SHENZHEN BRANCH.
Tel:86-755-89236770

HUIZHOU EPEVER TECHNOLOGY CO., LTD. Tel:86-752-3889706

info@epever.com www.epever.com

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### **ABOUT EPEVER**



We provide tools to explore the off-grid world without concerns of running out of electrical power. A team of talented creators came together, bringing their knowledge, experience, passion and curiosity to transform complex advanced technology into devices for harvesting energy from sun. Headquartered in China's capital Beijing, EPEVER benefits from diverse sources of talent. We started from a small company at 2007 and now we are playing a global role in off-grid solar equipment, with more than 120 partners all over the world.



Our mission is to ensure, everyone has access to electrical energy everywhere by helping people to perform better with higher efficiency where there is no grid power.EPEVER passed ISO9001: 2015, ISO14001:2015 and ISO45001:2018 and our products comply with international standards CGC-SOLAR, CE, ROSH, FCC, and ETL certificates. We established a high-tech manufacturing facility as our Huizhou subsidiary to increase the production capacity in 2019.



EPEVER is now a leading manufacturer of solar charge controllers, off-grid inverters, inverter chargers, solar power system and other solar power units.



SOLAR STATION SYSTEM SOLAR HOME SYSTEM











SOLAR VESSELS SYSTEM SOLAR STREETLIGHTS SYSTEM



SOLAR RVs SYSTEM









### We can provide many series, many models of MPPT solar charge controllers

Adopting the advanced MPPT control algorithm, EPEVER MPPT solar controller can minimize the maximum power point loss rate and loss time. It makes this product track the PV array's maximum power point and obtain maximum energy under any situation. Compared with PWM charging method, MPPT solar controllers can increase the energy utilization ratio by 20%-30%. Different power and size MPPT solar controllers can meet various power needs and provide safer electricity.

### **EPEVER MPPT Solar Charge Controllers Benefits**

99.5%

MPPT charging, the tracking efficiency up to 99.5%

98%

MPPT charging conversion efficiency up to 98%

### EPEVER Solar Charge Controllers Benefits-So Much More







More Energy

Smart Energy Management

Safe and Reliable







Easy Installation

Continuous Operation

High Efficiency



Tracer-AN(10A-40A)series charge controller adopts MPPT(Maximum Power Point Tracking)technology. In any situation, it can track the maximum power point (MPP) of the solar array and obtain the maximum solar energy rapidly and accurately. It can generate up to 30% more power compared with the PWM charge controller. This series can accept max.100V Voc and work with the solar panels which are designed for on-grid applications. The multifunction LCD display the system status vividly.

### Features:

- \*MPPT tracking efficiency above 99.5%
- \*Maximum charge conversion efficiency as high as 98%
- \*Support lead-acid and lithium-ion batteries
- \*Multiple load work modes
- \*Charging power and current limitation function
- \*High-temperature charging power derating function
- \*Standard Modbus communication protocol with RS485 interface
- \*Real-time energy statistics function

### **Specifications**

Model	Tracer1206AN	Tracer2206AN	Tracer1210AN	Tracer2210AN	Tracer3210AN	Tracer4210AN	
Nominal system voltage		12/24VDC/Auto					
Battery type		Lead-aci	d (Sealed/Gel/Flooded)/Li	thium (LiFePO4/Li(NiCoMn	)O <sub>2</sub> )/User		
Battery input voltage range			8~	32V			
Rated charge current	10A	20A	10A	20A	30A	40A	
Rated discharge current	10A	20A	10A	20A	30A	40A	
Rated charge power	130W/12V 260W/24V	260W/12V 520W/24V	130W/12V 260W/24V	260W/12V 520W/24V	390W/12V 780W/24V	520W/12V 1040W/24V	
Max. conversion efficiency			≤98	3.0%	,		
Tracking efficiency			≥99	9.5%			
Max. PV open circuit voltage	60V (At minin environme 46V(At 25°C enviro	num operating nt temperature) nment temperature)	100	V (At minimum operating 92V (At 25°C enviro	g environment temperatu nment temperature)	re) ;	
MPP voltage range	(Battery volta	ge +2V) ~ 36V		(Battery volt	age +2V) ~ 72V		
Equalization voltage			Sealed:14.6V,Flooded:14	4.8V,User-defined:9-17V			
Boost voltage		Ge	l:14.2V,Sealed:14.4V,Flood	ded:14.6V,User-defined:9-	17V		
Float voltage			Gel/Sealed/Flooded:13	.8V,User-defined:9-17V			
Low voltage reconnect voltage			Gel/Sealed/Flooded:12	.6V,User-defined:9-17V			
Low voltage disconnect voltage			Gel/Sealed/Flooded:11	.1V,User-defined:9-17V			
Self-consumption			≤12	2mA			
Temperature compensation (for lead-acid battery)			-3mV/°C/2	V (Default)			
Relative humidity			≤95%	6, N.C.			
Enclosure			IP	30			
Communication interface	RS485(RJ45)						
Grounding	Common negative						
Operating temperature range	-25°C ~ +45°C(100% input and output)						
Dimensions(LxWxH)(mm)	172×139×44	220×154×52	172×139×44	220×154×52	228×164×55	252×180×63	
Net weight	0.57kg	0.94kg	0.57kg	0.94kg	1.26kg	1.65kg	

- 1. The controlller can't automatically identify system voltage if lithium batteries were connected.
- 2. The voltage point is for 12V system, please \*2 in 24V system.

### Accessories (optional)



MT-75 Remote Meter



EPEVER TCP 306 Serial Device Server



MT-50 Remote Meter



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server



EPEVER-RTU-4G Wireless Data Transmission Unit



RS485-1M2S Extension Module

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.



Tracer-AN (50A-100A) series is the largest charge controller series in EPEVER's product range and can take up to 5KW solar panel. For even more power, the user can use PAL-ADP-50N to connect max. 6 units of a controller in parallel for up to 30KW system. The multiple dry contact signals are designed for a diversified application.

### Features:

- \*MPPT tracking efficiency above 99.5%
- \*Maximum charge conversion efficiency as high as 98%
- \*Support lead-acid and lithium-ion batteries
- \*Common negative grounding, Charging current up to 100A
- \*Charging power and current limitation function
- \*High-temperature charging power derating function
- \*3 relays design for different demand: utility, generator and load
- \*Support up to 6 units in parallel
- \*Remote temperature and voltage sensor design
- \*Isolated RS-485 with 5VDC/200mA and MODBUS protocol

### **Specifications**

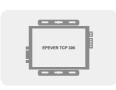
Model	Tracer6210AN	Tracer5415AN	Tracer6415AN	Tracer8415AN	Tracer10415AN	Tracer5420AN	Tracer6420AN	Tracer8420AN	Tracer10420AN
Nominal system voltage	12/24VDC/Auto				12/24/36/4	8VDC/Auto			
Battery type			Lea	d-acid (Sealed/Gel/Fl	ooded)/Lithium (LiFe	PO4/Li(NiCoMn)O2)/U	Jser		
Battery input voltage range	8V~32V	8V~68V	8V~68V	8V~68V	8V~68V	8V~68V	8V~68V	8V~68V	8V~68V
Rated charge current	60A	50A	60A	80A	100A	50A	60A	80A	100A
Rated charge power	750W/12V 1500W/24V	625W/12V 1250W/24V 1875W/36V 2500W/48V	750W/12V 1500W/24V 2250W/36V 3000W/48V	1000W/12V 2000W/24V 3000W/36V 4000W/48V	1250W/12V 2500W/24V 3750W/36V 5000W/48V	625W/12V 1250W/24V 1875W/36V 2500W/48V	750W/12V 1500W/24V 2250W/36V 3000W/48V	1000W/12V 2000W/24V 3000W/36V 4000W/48V	1250W/12V 2500W/24V 3750W/36V 5000W/48V
Max. conversion efficiency	98.00%	98.30%	98.60%	98.50%	98.60%	98.30%	98.10%	98.50%	98.50%
Tracking efficiency					≥99.5%				
Max. PV open circuit voltage	100V(At minimum operating environment temperature) 92V (At 25°C environment temperature)	150V(A	t minimum operating 138V(At 25°C enviro	g environment tempe nment temperature)	rature)	200V (.		g environment temp nment temperature)	erature)
MPP voltage range	(Battery Voltage +2V)∼72V		(Battery Volta	ge +2V)~108V			(Battery Volta	ge+2V)~144V	
Equalization voltage				Sealed:14.6V	Flooded:14.8V,User-d	defined:9-17V			
Boost voltage				Gel:14.2V,Sealed:1	4.4V,Flooded:14.6V,U	ser-defined:9-17V			
Float voltage				Gel/Sealed/I	Flooded:13.8V,User-de	efined:9-17V			
Low voltage reconnect voltage				Gel/Sealed/I	Flooded:12.6V,User-de	efined:9-17V			
Low voltage disconnect voltage				Gel/Sealed/I	Flooded:11.1V,User-de	efined:9-17V			
Self-consumption				98mA/12V;	60mA/24V;50mA/36V	;46mA/48V			
Temperature compensation ( for lead-acid battery)					-3mV/°C/2V(Default)				
Relative humidity					5% to 95% (N.C.)				
Enclosure		IP20							
Communication interface	RS485(5VDC/200mA, Two RJ45 ports in parallel)								
Grounding		Common negative							
Operating temperature range		-25°C∼+60°C(derating above 45°C)							
Dimensions(LxWxH)(mm)	340×232×105.2	261×216×119	340×236×119	394×240×134	394×242×143	261×216×119	340×236×119	394×240×134	394×242×143
Net weight	3.5kg	3.5kg	4.5kg	6.1kg	7.4kg	3.5kg	4.5kg	6.1kg	7.4kg

- 1. The controlller can & apos; t automatically identify system voltage if lithium batteries were connected.
- 2. The voltage point is for 12V system, please \*2 in 24V system, \*3 in 36V system, \*4 in 48V system.

### Accessories (optional)



Remote Meter



EPEVER TCP 306 Serial Device Server



Remote Meter



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server



EPEVER-RTU-4G Wireless Data Transmission Unit



PAL-ADP-50A Parallel Adapter

 ${\tt EPEVER}\ can \ provide\ many\ accessories\ to\ meet\ different\ applications.\ Please\ contact\ sales\ for\ more\ accessories\ information.$ 



XTRA(10A-40A) series is advanced maximum power point tracking (MPPT) charge controllers for off-grid photovoltaic systems, with optional display units (XDB1/XDS1/XDS2). It is designed according to the international standard with higher quality, reliability, and safety. The limitation function of the charging power, charging current, and automatic power reduction function fully ensure stability when working with oversize PV modules(max.1.5 times of rated power) and operating under a hightemperature environment.

### Features:

- \*MPPT tracking efficiency above 99.5%
- \*Maximum charge conversion efficiency as high as 97.4%
- \*Support lead-acid and lithium-ion batteries
- \*Multiple load work modes
- \*Charging power and current limitation function
- \*High-temperature charging power derating function
- \*Standard Modbus communication protocol with isolated RS485 interface
- \*Real-time energy statistics function
- \*Optional LCD display units (XDB1/XDS1/XDS2) and accessories
- \*IP33 ingress protection design
- \*CE(LVD IEC62109,EMC EN3/1-6-61000)and ROHS,ETL(UL-1741:2010 and Canadian CSA C22.2 No.107.1.01),FCC Class B Part 15 Compliant, IEC 62509:2010

### **Specifications**

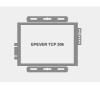
	•										
Leaf-acid Sealed (Sealed)   Leaf-Activity   Leaf-acid Sealed (Sealed)   Leaf-Activity   Leaf-acid Sealed (Sealed)   Leaf-Activity   Leaf-acid Sealed)   Leaf-Activity   Leaf-acid Sealed)   Leaf-Activity   Leaf-acid Sealed)   Leaf-Activity   Leaf-acid Sealed)   Leaf		XTRA1206N	XTRA2206N	XTRA1210N	XTRA2210N	XTRA3210N	XTRA4210N	XTRA3215N	XTRA4215N	XTRA3415N	XTRA4415N
## Sate of charge current    10A   20A   10A   20A   30A   40A   40A   30A   40A   40A   30A   40A   40A   30A   40A   4	Nominal system voltage	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24/36/ 48VDC/Auto	12/24/36/ 48VDC/Auto
Tacking efficiency	Battery type				Lead-acid (Seale	ed/Gel/Flooded)/Li	thium (LiFePO4/Li(N	NiCoMn)O2)/User			
Rated discharge current	Battery input voltage range	8~32V	8~32V	8~32V	8~32V	8~32V	8∼32V	8∼32V	8~32V	8~68V	8~68V
	Rated charge current	10A	20A	10A	20A	30A	40A	30A	40A	30A	40A
380W12V   260W12V   260W	Rated discharge current	10A	20A	10A	20A	30A	40A	30A	40A	30A	40A
Tracking efficiency	Rated charge power									780W/24V 1170W/36V	520W/12V 1040W/24V 1560W/36V 2080W/48V
Max. PV open circuit voltage	Max. conversion efficiency	97.90%	98.30%	98.20%	98.30%	98.60%	98.60%	97.60%	97.90%	98.10%	98.50%
Max. PV open circuit voltage	Tracking efficiency					≥99	9.5%				
Equalization voltage    20/-369/   +20/-369/   +20/-329/   +20/-729/   +20/-729/   +20/-729/   +20/-729/   +20/-1089/   +2	Max. PV open circuit voltage	operatinge temper 46V(A	nvironment rature) it 25°C	100V (At	minimum operatin 2V (At 25°C enviro	g environment tem nment temperature	nperature) e)				
Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-1TV	MPP voltage range		(Battery voltage +2V)~36V	(Battery voltage +2V)~72V	(Battery voltage +2V)~72V	(Battery voltage +2V)~72V	(Battery voltage +2V)~72V			(Battery voltage +2V)~108V	(Battery voltage +2V)~108V
Communication interface   Gel/Sealed/Flooded:13.8V,User-defined:9-17V   Gel/Sealed/Flooded:13.8V,User-defined:9-17V   Gel/Sealed/Flooded:11.1V,User-defined:9-17V   Gel/Sealed/Flooded:12.6V,User-defined:9-17V   Gel/Sealed/Flooded:11.1V,User-defined:9-17V   Gel/Sealed/Flooded:11.1V,User-defined:9-	Equalization voltage				Seal	ed:14.6V,Flooded:1	4.8V,User-defined:	9-17V			
Convoltage reconnect voltage   Gel/Sealed/Flooded:12.6v,User-defined:9-17V	Boost voltage				Gel:14.2V	Sealed:14.4V,Flood	ded:14.6V,User-defi	ned:9-17V			
Communication interface   Communication in	Float voltage				Gel/	Sealed/Flooded:13	3.8V,User-defined:9	-17V			
Self-consumption \$\begin{array}{c ccccccccccccccccccccccccccccccccccc	Low voltage reconnect voltage				Gel/	Sealed/Flooded:12	2.6V,User-defined:9	-17V			
\$\leq \text{14mA}(12V) \ \leq \text{14mA}(12V) \ \leq \text{15mA}(24V) \ \leq \text{15mA}(24V) \ \leq \text{15mA}(24V) \ \leq \text{16mA}(24V) \ \le	Low voltage disconnect voltage				Gel/	Sealed/Flooded:11	1.1V,User-defined:9	-17V			
Felative humidity   Sepsilon	Self-consumption									≤16mA(24V) ≤13mA(36V)	≤30mA(12V) ≤16mA(24V) ≤13mA(36V) ≤13mA(48V)
Enclosure IP33  Communication interface RS485(RJ45)  Grounding Common negative  Operating temperature range -25°C~+50°C(LCD);-30°C~+50°C(No LCD)  Dimensions(LxWxH)(mm) 175×143×48 217×158×56.5 175×143×48 217×158×56.5 230×165×63 255×185×67.8 255×185×67.8 255×187×75.7 255×187×75.7 255×189×83	Temperature compensation ( for lead-acid battery)				I	-3mV/°C/2	V (Default)				
Communication interface  RS485(RJ45)  Common negative  Common negative  Operating temperature range  -25°C~+50°C(LCD);-30°C~+50°C(No LCD)  -25°C~+45°C(LCD);-30°C~+45°C(LCD);-30°C~+45°C(No LCD)  Dimensions(LxWxH)(mm)  175×143×48 217×158×56.5 175×143×48 217×158×56.5 230×165×63 255×185×67.8 255×185×67.8 255×187×75.7 255×189×83	Relative humidity					≤959	%, N.C				
Common negative  -25°C~+50°C(LCD);-30°C~+50°C(No LCD)  -25°C~+45°C(LCD);-30°C~+45°C(No LCD)  Dimensions(LxWxH)(mm)  175×143×48 217×158×56.5 175×143×48 217×158×56.5 230×165×63 255×185×67.8 255×185×67.8 255×187×75.7 255×187×75.7 255×189×83	Enclosure		IP33								
Operating temperature range  -25°C~+50°C(LCD);-30°C~+50°C(No LCD)  -25°C~+45°C(LCD);-30°C~+45°C(LCD);-30°C~+45°C(No LCD)  Dimensions(LxWxH)(mm)  175×143×48 217×158×56.5 175×143×48 217×158×56.5 230×165×63 255×185×67.8 255×185×67.8 255×187×75.7 255×187×75.7 255×189×83	Communication interface		RS485(RJ45)								
Dimensions(LxWxH)(mm) 175×143×48 217×158×56.5 175×143×48 217×158×56.5 230×165×63 255×185×67.8 255×185×67.8 255×187×75.7 255×187×75.7 255×189×83	Grounding		Common negative								
	Operating temperature range		-25°C~+50°C(LCD);-30°C~+50°C(No LCD) -25°C~+45°C(LCD);-30°C~+45°C(No LCD)							۵)	
Net weight 0.57kg 0.96kg 0.57kg 0.96kg 1.31kg 1.70kg 1.70kg 2.07kg 2.07kg 2.47kg	Dimensions(LxWxH)(mm)	175×143×48	217×158×56.5	175×143×48	217×158×56.5	230×165×63	255×185×67.8	255×185×67.8	255×187×75.7	255×187×75.7	255×189×83.2
	Net weight	0.57kg	0.96kg	0.57kg	0.96kg	1.31kg	1.70kg	1.70kg	2.07kg	2.07kg	2.47kg

- $1. \, {\it The controlller can \& apos; tautomatically identify system voltage if lithium batteries were connected.}$
- 2. The voltage point is for 12V system, please \*2 in 24V system, \*3 in 36V system, \*4 in 48V system.

### Accessories (optional)



MT-75 Remote Meter



**EPEVER TCP 306** Serial Device Server



MT-50 Remote Meter



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server



EPEVER-RTU-4G Wireless Data Transmission Unit



RS485-1M2S

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.



DuoRacer series is perfect for off-grid solar system such as motorhome, RVs, campers, boats, and so on. It charges the main battery (BATT1) for living, and supports trickle charging (max. 1A) to the start battery (BATT2) of vehicles at the same time.

### Features:

- \*Maximum Power Point Tracking technology with ultra-fast tracking speed and the tracking efficiency is no less than 99.5%
- \*Advanced MPPT control algorithm to minimize the MPPlost rate and lost time
- $^{\star}$ The wider range of the MPP operation voltage to improve the PV module utilization
- \*Charging power & charging current limit function(BATT1)
- \*High quality and low failure rate components
- \*Digital circuit control of adaptive three-stage charging mode
- \*BATT1 type can be set via LED/LCD
- \*Product runs into the low self-consumption mode if PV voltage is lower than 5V and there is no manual operation for some time.
- \*100% charging and discharging in operating environmental temperature range
- \*LED and LCD display units optional
- \*AES control signal for car refrigerator to avoid energy waste
- \*Standard Modbus protocol and RS485 (5V/200mA) communication port for the customer to expand the application area

### **Specifications**

Model	DR1106N- DDB/DDS	DR2106N- DDB/DDS	DR3106N - DDB/DDS	DR1206N - DDB/DDS	DR2206N - DDB/DDS	DR3206N - DDB/DDS	DR2210N - DDB/DDS	DR3210N - DDB/DDS
BATT1 rated voltage	12VDC	12VDC	12VDC	12/24VDC	12/24VDC	12/24VDC	12/24VDC	12/24VDC
BATT2 rated voltage	12VDC	12VDC	12VDC	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto
BATT1 rated charge current	10A	20A	30A	10A	20A	30A	20A	30A
BATT2 rated charge current	1A	1A	1A	1A	1A	1A	1A	1A
Battery input voltage range	8.5~16V	8.5~16V	8.5~16V	8.5~32V	8.5~32V	8.5~32V	8.5~32V	8.5~32V
Max . PV open circuit voltage		60V	(At minimum operating 46V (At 25°C environ		ure)	,	100V (At minir environment t 92V(At 25°C environ	emperature)
MPP voltage range			(Battery Volta	age+2V)~36V			(Battery Volta	age+2V)~72V
Rated charge power	130W/12V	260W/12V	390W/12V	130W/12V 260W/24V	260W/12V 520W/24V	390W/12V 780W/24V	260W/12V 520W/24V	390W/12V 780W/24V
Max. conversion efficiency	96.30%	96.90%	97.40%	97.40%	97.50%	98%	97.50%	98%
Full load efficiency	95.50%	94.60%	94.20%	97%	96%	96%	96%	96%
Self-consumption	12mA/12	V;6mA/12V (Low-pow	er mode)	12mA/12V;8mA/24V;	4mA/12V;3mA/24V (	Low-power mode)	26mA/12V;15mA/24V;1 (Low-pow	
Temperature compensation				-3mV/°C/2\	/(default)			
Grounding				Common	negative			
BATT2 full voltage	13.8V/12V	13.8V/12V	13.8V/12V	13.8V/12V; 27.6V/24V(default)	13.8V/12V; 27.6V/24V(default)	13.8V/12V; 27.6V/24V(default)	13.8V/12V; 27.6V/24V(default)	13.8V/12V; 27.6V/24V(default)
BATT2 charge return voltage	13V/12V	13V/12V	13V/12V	13V/12V; 26V/24V(default)	13V/12V; 26V/24V(default)	13V/12V; 26V/24V(default)	13V/12V; 26V/24V(default)	13V/12V; 26V/24V(default)
Operating temperature range	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+45°C(DDS) -30°C~+45°C(DDB)	-20°C~+50°C(DDS) -30°C~+50°C(DDB)	-20°C~+45°C(DDS) -30°C~+45°C(DDB)
Enclosure		IP33						
Dimension(LxWxH)(mm)	227.2×143×58	243.7×158×63	247.2×165×68.5	227.2×143×58	243.7×158×63	247.2×165×68.5	243.7×158×63	247.2×165×68.5
Net weight	0.8kg	1.1kg	1.4kg	0.8kg	1.1kg	1.4kg	1.1kg	1.4kg

### Accessories (optional)



 ${\tt EPEVER}\ can \ provide\ many\ accessories\ to\ meet\ different\ applications.\ Please\ contact\ sales\ for\ more\ accessories\ information.$ 

7 Turn the sun on Turn the sun



Tracer-BN series adopts common negative design, advanced MPPT control algorithm, and die-cast aluminum heat dissipation design. Modbus communication protocol interface is convenient for extending applications such as telecommunication base station, household system, RV system, street lighting system, field monitoring system, etc.

### Features:

- \*MPPT tracking efficiency above 99.5%
- \*Maximum charge conversion efficiency as high as 98%
- \*Multiple load work modes
- \*Real-time energy statistics function
- \*Battery type selection: Sealed, Gel, Flooded and User(programmable)
- \*Extensive electronic protection
- \*Standard Modbus communication protocol with RS485 interface
- \*Die-cast aluminum case design

### **Specifications**

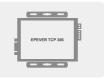
Model	Tracer2215BN	Tracer3215BN	Tracer4215BN			
Nominal system voltage		12/24VDC/Auto				
Battery type		Sealed(Default)/Gel/Flooded/User				
Battery input voltage range		8~32V				
Rated charge current	20A	30A	40A			
Rated discharge current	20A	20A	20A			
Rated charge power	260W/12V 520W/24V	390W/12V 780W/24V	520W/12V 1040W/24V			
Max. conversion efficiency		≤98.0%				
Tracking efficiency		≥99.5%				
Max. PV open circuit voltage	150V(at minimum op	erating environment temperature) 138V(at 25°C enviror	nment temperature)			
MPP voltage range		Battery voltage+2V~108V				
Equalization voltage		Sealed:14.6V,Flooded:14.8V,User-defined:9-17V				
Boost voltage	Ge	el:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V				
Float voltage		Gel/Sealed/Flooded:13.8V,User-defined:9-17V				
Low voltage reconnect voltage		Gel/Sealed/Flooded:12.6V,User-defined:9-17V				
Low voltage disconnect voltage		Gel/Sealed/Flooded:11.1V,User-defined:9-17V				
Self-consumption		≤60mA(12V); ≤30mA(24V)				
Temperature compensation		-3mV/°C/2V(Default)				
Relative humidity		≤95% (N.C.)				
Enclosure		IP30				
Communication interface	RS485(RJ45)					
Grounding	Common negative					
Operating temperature range	-35°C~+55°C					
Dimensions(LxWxH)mm	216.6×142.6×56 280.7×159.7×60 302.5×182.7×63.5					
Net weight	1.5kg	2.2kg	2.9kg			

The voltage point is for 12V system, please \*2 in 24V system.

### Accessories (optional)



MT-75 Remote Meter



EPEVER TCP 306 Serial Device Server



MT-50 Remote Meter



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server



EPEVER-RTU-4G Wireless Data Transmission Unit



RS485-1M2S Extension Module

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.



IT6415ND charge controller with 60A DC output current adopts advanced Maximum Power Point Tracking (MPPT) algorithm, which can harvest the maximum power from the solar array to charge the battery. It is capable of supporting up to 800W PV power in 12V system, 1600W in 24V system, 2400W in 36V system, and 3200W in 48V system.

### Features:

- \*MPPT tracking efficiency above 99.5%
- \*Maximum charge conversion efficiency as high as 98%
- \*Battery type selection: Sealed, Gel, Flooded and User(programmable)
- \*Multiphase sychronous rectification technology (MSRT)
- \*60A DC load output current
- \*Remote monitoring function
- \*Data-log function, recording system running information and event
- \*Die cast aluminum case design
- \*Extensive electronic protections
- \*IEC62109 certified
- \*With RS-485, RS-232 communication bus interface and Modbus communication protocol

### **Specifications**

Model	IT6415ND			
Nominal system voltage	12/24/36/48VDC			
Battery type	Sealed(Default)/Gel/Flooded/User			
Battery input voltage range	8~68V			
Rated charge current	60A			
Rated discharge current	60A			
Max. conversion efficiency	≤98.0%			
Tracking efficiency	≥99.5%			
Max. PV open circuit voltage	150V( At minimum operating environment temperature) 138V(At 25°C environment temperature)			
MPP voltage range	(Battery voltage+2V)~108V			
Rated charge powe	800W/12V;1600W/24V;2400W/36V;3200W/48V			
Equalization voltage	Sealed:14.6V,Flooded:14.8V,User-defined:9-17V			
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V			
Float Voltage	Gel/Sealed/Flooded:13.8V,User-defined:9-17V			
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V,User-defined:9-17V			
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V,User-defined:9-17V			
Self-consumption	1.4W~2.6W			
Temperature compensation	-3mV/°C/2V (Default)			
Relative humidity	≤95%, N.C.			
Enclosure	IP20			
Communication port	RS485, RS232			
Grounding	Common Negative			
Operating temperature range	-25°C∼+50°C			
Dimensions(LxWxH)mm	440×231×110			
Net weight	5.9kg			

### Accessories (optional)



MT-75 Remote Meter



EPEVER TCP 306 Serial Device Server



MT-50 Remote Mete



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server



EPEVER-RTU-4G Wireless Data Transmission Unit



RS485-1M2S Extension Module

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.

# Tracer-BP IOT Solar Charge Controller

10-30A,12/24/36/48VDC





### Overview:

Tracer-BP series adopts advanced MPPT (Maximum Power Point Tracking) charging methods which will results in up to 30% charging efficiency increase compared with the PWM charge controllers. The RS485 interface with standard MODBUS communication protocol and 5V,150mA power supply makes it easy for the customer to expand the application. With the accessories like MT50, WiFi module, Bluetooth adapter, IoT module, users can realize remote monitoring and controlling the solar system via app and cloud platform.

### Features:

- \*MPPT(maximum power point tracking)charging
- \*Support lead-acid and lithium-ion batteries
- \*Lithium battery self-activating function
- \*Multi load control mode
- \*Extensive electronic protections
- \*RS 485 communication, support IoT monitoring
- \*IP68 Ingress protection(1.5 meters, 72h)

### **Specifications**

Model	Tracer2606BP	Tracer3906BP	Tracer5206BP	Tracer2610BP	Tracer3910BP	Tracer5210BP	Tracer7810BP
Nominal system voltage				12/24VDC/Auto			
Battery type		I	ead-acid (Sealed/Gel/F	ooded)/Lithium (LiFePC	04/Li(NiCoMn)O2)/User		
Battery input voltage range				8.5~32VDC			
Rated charge current	10A	15A	20A	10A	15A	20A	30A
Rated discharge current	10A	15A	20A	10A	15A	20A	30A
Rated charge power	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V	390W/12V 780W/24V
Max. conversion efficiency				≤98%			
Tracking efficiency				≥99%			
Max. PV open circuit voltage	60V( at minimum 46V( at 25°C e	n operating environmen environment temperatu	t temperature ) re )	100V( 92	at minimum operating V( at 25°C environment	environment temperatu temperature )	ire)
MPP voltage range	(Battery voltage+2V) ~36V	(Battery voltage+2V) ~36V	(Battery voltage+2V) ~36V	(Battery voltage+2V) ~72V	(Battery voltage+2V) ~72V	(Battery voltage+2V) ~72V	(Battery voltage+2V) ~72V
Equalization voltage			Sealed:14.6V	Flooded:14.8V,User-defi	ined:9-17V		
Boost voltage			Gel:14.2V,Sealed:1	4.4V,Flooded:14.6V,Use	r-defined:9-17V		
Float voltage			Gel/Sealed/	Flooded:13.8V,User-defi	ned:9-17V		
Low voltage reconnect voltage			Gel/Sealed/	Flooded:12.6V,User-defi	ned:9-17V		
Low voltage disconnect voltage			Gel/Sealed/	Flooded:11.1V,User-defi	ned:9-17V		
Self-consumption			<	13mA(12V); ≤11.5mA(	24V)		
Temperature compensation ( for lead-acid battery)				-3mV/°C/2V(default)			
Enclosure	IP68						
Communication interface	RS485 (waterproof)						
Operating temperature range	-40°C~+60°C	-40°C~+60°C	-40°C∼+60°C	-40°C~+60°C	-40°C∼+60°C	-40°C∼+60°C	-40°C∼+50°C
Dimensions(LxWxH)(mm)	124×89×30	150×93.5×32.7	153×105×52.1	124×89×30	150×93.5×32.7	153×105×52.1	153.3×105×52.1
Net weight	0.54kg	0.74kg	1.20kg	0.54kg	0.74kg	1.20kg	1.26kg

- 1. The controlller can & apos; t automatically identify system voltage if lithium batteries were connected.
- 2. The voltage point is for 12V system, please \*2 in 24V system.

### Accessories (optional)



MT-50 Remote Meter



EPEVER TCP 306 Serial Device Server



EPEVER-RTU-4G Wireless Data Transmission Unit



EPEVER WiFi 2.4G RJ45 D WIFI Serial Server

 ${\tt EPEVER}\, can\, provide\, many\, accessories\, to\, meet\, different\, applications.$ 

Please contact sales for more accessories information.

# Tracer-BPL IOT Solar Controller & LED Driver

10-20A,12/24VDC





### Overview:

Tracer-BPL series MPPT solar charge controller combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed. This series adopts the advanced MPPT (Maximum Power Point Tracking) charging methods which will results up to 30% charging efficiency increase compared with the PWM charge controllers. Thanks to the RS485 communication, the Tracer-BPL has the ability to realize remote monitoring via IoT.

### Features:

- \*MPPT charging mode
- \*LED load dimmer function
- \*Support lead-acid and lithium-ion batteries
- \*Lithium battery self-activating function
- \*Intelligent power derating to ensure 365 days lighting on
- \*Multiple load control modes
- \*Extensive electronic protection
- \*RS485 communication port to realize IOT monitor
- \*IP67 Ingress protection(1.5 meters, 72h)

### **Specifications**

	Tracer2606BPL	Tracer3906BPL	Tracer5206BPL	Tracer2610BPL	Tracer3910BPL	Tracer5210BPL		
Nominal system voltage		12/24VDC/Auto						
Battery type		Lead-aci	d (Sealed/Gel/Flooded)/Lith	nium (LiFePO4/Li(NiCoMn)O2	)/User			
Battery input voltage range			9~3	2VDC				
Rated charge current	10A	15A	20A	10A	15A	20A		
Rated charge power	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V		
Max. output current	3.3A	4.5A	6.6A	3.3A	4.5A	6.6A		
Max. output power	100W	130W	200W	100W	130W	200W		
Max. PV open circuit voltage	60V( at minimu 46V( at 25°C	m operating environment to environment temperature	emperature )	100V( at minim 92V( at 25°C	um operating environment ( environment temperature )	temperature )		
MPP voltage range		(Battery voltage+2V)~36V			(Battery voltage+2V)~72V			
Output voltage range			( Max. battery vo	oltage+2V)~58V				
Output current control accuracy			<	2%				
Equalization voltage			Sealed:14.6V,Flooded:14.	.8V,User-defined:9-17V				
Boost voltage		Ge	l:14.2V,Sealed:14.4V,Floode	d:14.6V,User-defined:9-17V				
Float voltage			Gel/Sealed/Flooded:13.	8V,User-defined:9-17V				
Low voltage reconnect voltage			Gel/Sealed/Flooded:12.	6V,User-defined:9-17V				
Low voltage disconnect voltage			Gel/Sealed/Flooded:11.	1V,User-defined:9-17V				
Self-consumption			≤15mA/12V	/;≤22mA/24V				
Temperature compensation ( for lead-acid battery)			-3mV/°C/2	V(default)				
Enclosure	IP67							
Communication interface	RS485(waterproof)							
Operating temperature range	-40°C~+60°C							
Dimensions(LxWxH)(mm)	124×89×30	150×93.5×32.7	153×105×52.1	124×89×30	150×93.5×32.7	153×105×52.1		
Net weight	0.54kg	0.73kg	1.18kg	0.54kg	0.73kg	1.18kg		

- $1. \ The \ controller \ can \& apos; tautomatically \ identify \ system \ voltage \ if \ lithium \ batteries \ were \ connected.$
- 2. The voltage point is for 12V system, please \*2 in 24V system.

### Accessories (optional)





PC

CC-USB-RS485-150U-4LLT

 ${\tt EPEVER}\, can\, provide\, many\, accessories\, to\, meet\, different\, applications.$ 

Please contact sales for more accessories information.

# Tracer-LPLI Solar Controller & LED Driver 10-20A,12/24VDC Tracer521G/PI Merry Book Pi Tracer521G/PI Merry Book P

### Overview:

Tracer-LPLI series MPPT solar charge controller combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed. This series adopts the advanced MPPT (Maximum Power Point Tracking) charging methods which will result up to 30% charging efficiency increase compared with the PWM charge controllers.

### Features:

- \*MPPT charging mode
- \*Support lead-acid and lithium-ion batteries
- \*Lithium battery self-activating function
- \*Advanced intelligent power derating function
- \*Multiple load control modes
- \*Automatic load test feature during installation
- \*Extensive electronic protection
- \*Infrared wireless communication design
- \*IP68 Ingress protection(1.5 meters, 72h)

### Specifications

Model	Tracer1305LPLI	Tracer2606LPLI	Tracer3906LPLI	Tracer5206LPLI	Tracer2610LPLI	Tracer3910LPLI	Tracer5210LPLI
Nominal system voltage	12VDC	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto
Battery type		L	ead-acid (Sealed/Gel/Fl	ooded)/Lithium (LiFeP0	O <sub>4</sub> /Li(NiCoMn)O <sub>2</sub> )/User	1	
Battery input voltage range	8.5~16VDC	8.5~32VDC	8.5~32VDC	8.5~32VDC	8.5~32VDC	8.5~32VDC	8.5~32VDC
Rated charge current	10A	10A	15A	20A	10A	15A	20A
Rated charge power	130W/12V	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V	130W/12V 260W/24V	200W/12V 400W/24V	260W/12V 520W/24V
Max. output current	3.3A	3.3A	4.5A	6.6A	3.3A	4.5A	6.6A
Max. output power	100W	100W	130W	200W	100W	130W	200W
Max. PV open circuit voltage	50V(Min. Temp.) 45V(25°C)		n operating environmen environment temperatu		100V(at minimu 92V(at 25°C e	m operating environme environment temperatu	nt temperature) re)
MPP voltage range		(Battery volta	age+2V)~36V		(1	Battery voltage+2V)~72	V
Output voltage range	( Max. batteryv oltage+2V)∼46V	( Max. battery voltage+2V)∼58V	( Max. battery voltage+2V)~58V	( Max. battery voltage+2V)∼58V	( Max. battery voltage+2V)∼58V	( Max. battery voltage+2V)∼58V	( Max. battery voltage+2V)∼58V
Output current control accuracy				≤2%			'
Equalization voltage			Sealed:14.6V	Flooded:14.8V,User-def	ined:9-17V		
Boost voltage			Gel:14.2V,Sealed:1	4.4V,Flooded:14.6V,Use	r-defined:9-17V		
Float voltage			Gel/Sealed/	Flooded:13.8V,User-defi	ned:9-17V		
Low voltage reconnect voltage			Gel/Sealed/	Flooded:12.6V,User-defi	ned:9-17V		
Low voltage disconnect voltage			Gel/Sealed/	Flooded:11.1V,User-defi	ned:9-17V		
Self-consumption			:	≤15mA/12V;≤22mA/24	V		
Temperature compensation ( for lead-acid battery)				-3mV/°C/2V (Default)			
Enclosure	IP68(1.5m,72h)						
Communication interface	IR						
Operating temperature range	-40°C∼+60°C						
Dimensions(LxWxH)(mm)	124×89×30	124×89×30	150×93.5×32.7	153×105×52.1	124×89×30	150×93.5×32.7	153×105×52.1
Net weight	0.52kg	0.52kg	0.71kg	1.18kg	0.52kg	0.71kg	1.18kg

- 1. The controlller can & apos; tautomatically identify system voltage if lithium batteries were connected.
- 2. The voltage point is for 12V system, please \*2 in 24V system.

### Accessories (optional)



RC-10 IR Remote Controller



### We can provide many series, many models of PWM solar charge controllers

 $Adopting\ PWM\ pulse\ width\ modulation\ technology,\ EPEVER\ PWM\ solar\ controller\ can\ work\ within\ the\ environment$ temperature at full load. Complete electronic protections ensure the power generation revenue and reduce the input and maintenance cost. Different power and size PWM solar controllers can meet various power needs and provide safer electricity.

### **EPEVER PWM Solar Charge Controllers Benefits**

- -High efficiency PWM charging
- -Temperature compensation
- -Battery type optional
- -Display optional, programmable
- -Full encapsulated PCB

-Aluminum housing for better cooling

cost wise

- -Various load working mode
- -Extensive Electronic protection
- -Long lifespan
- -USB output

# **USB** output

### EPEVER Solar Charge Controllers Benefits-So Much More



More Energy



Smart Energy Management



Safe and Reliable



Easy Installation



**Continuous Operation** 



High Efficiency





GoMate is a 30A negative-ground, flush mount solar charge controller, designed for an aesthetically clean and integrated look on RV and Vessel. The GoMate adopts highly efficient PWM charging mode also comes equipped with special LCD display to show the real-time operating status of the system. The RS485 is used to communicate with the EPEVER WIFI module, Bluetooth adapter, and PC software.

### Features:

- \*Flush mounted and embedded installation design
- \*3-Stage Intelligent PWM charging: Bulk, Boost/Equalize, and Float
- \*Battery type: Sealed, Gel, Flooded, and User
- \*Real-time energy statistics feature
- \*Battery temperature compensation feature
- \*Digital LCD monitor for informative display of operational parameters and fault messages
- \*Voltage drop and temperature compensation sampling interface design
- \*RS485 communication port with Modbus protocol, and short circuit protection for 5V/200mA power supply
- \*Rated charging current at working temperature without de-rating
- \*Extensive electronic protections
- \*Monitor and set the parameters via PC software or APP

**Specifications** 

	GM3024N
Nominal system voltage	12/24VDC/Auto
Battery type	Sealed(Default)/Gel/Flooded/User
Battery input voltage range	8V~32V
Rated charge current	30A
Max. PV open circuit voltage	50V
Equalization voltage	Sealed:14.6V,Flooded:14.8V
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V
Float voltage	Gel/Sealed/Flooded:13.8V
Self-consumption	≤4.2mA/12V;≤2.6mA/24V
Temperature compensation	-3mV/°C/2V(Default)
Operating temperature range	-20°C∼+55°C
Relative humidity	≤95%, N.C.
Enclosure	IP30
Communication interface	RS485(RJ45)
Grounding	Common negative
Dimensions(LxWxH)(mm)	178.5×105.5×48.3
Net Weight	0.31kg



LS-B series is a common positive PWM charge controller. Thanks to the RS485 interface. The parameters can be configured via com. Port, APP, and PC software. It is widely applied to solar home systems, and surveillance system, etc.

### Features:

- \*Series PWM charging mode
- \*Multiple load control modes
- \*Full load operation within the working temperature range
- \*Extensive electronic protection
- \*Variety optional accessories
- \*Standard Modbus communication protocol with RS485 interface

### **Specifications**

	LS1024B	LS2024B	LS3024B			
Nominal system voltage	12/24VDC/Auto					
Battery type	Se	aled(Default)/Gel/Flooded/Use	er			
Battery input voltage range		8~32V				
Rated charge current	10A	20A	30A			
Rated discharge current	10A	20A	30A			
Max. PV open circuit voltage		50V				
Equalization voltage	Sealed:14	i.6V,Flooded:14.8V,User-define	ed:9-17V			
Boost voltage	Gel:14.2V,Seal	ed:14.4V,Flooded:14.6V,User-d	efined:9-17V			
Float voltage	Gel/Seal	ed/Flooded:13.8V,User-defined	d:9-17V			
Low voltage reconnect voltage	Gel/Seal	ed/Flooded:12.6V,User-defined	d:9-17V			
Low voltage disconnect voltage	Gel/Seal	ed/Flooded:11.1V,User-define	d:9-17V			
Self-consumption		≤8.4mA/12V;≤7.8mA/24V				
Temperature compensation		-3mV/°C/2V (default)				
Relative humidity		≤95% (N.C.)				
Enclosure		IP30				
Communication interface	RS485(RJ45)					
Grounding	Common Positive					
Operating temperature range	-35°C~50°C					
Dimensions(LxWxH)(mm)	138.6×69.3×37	159.6×81.4×47.8	200.6×101.3×57			
Net Weight	0.13kg	0.30kg	0.50kg			

### Overview:

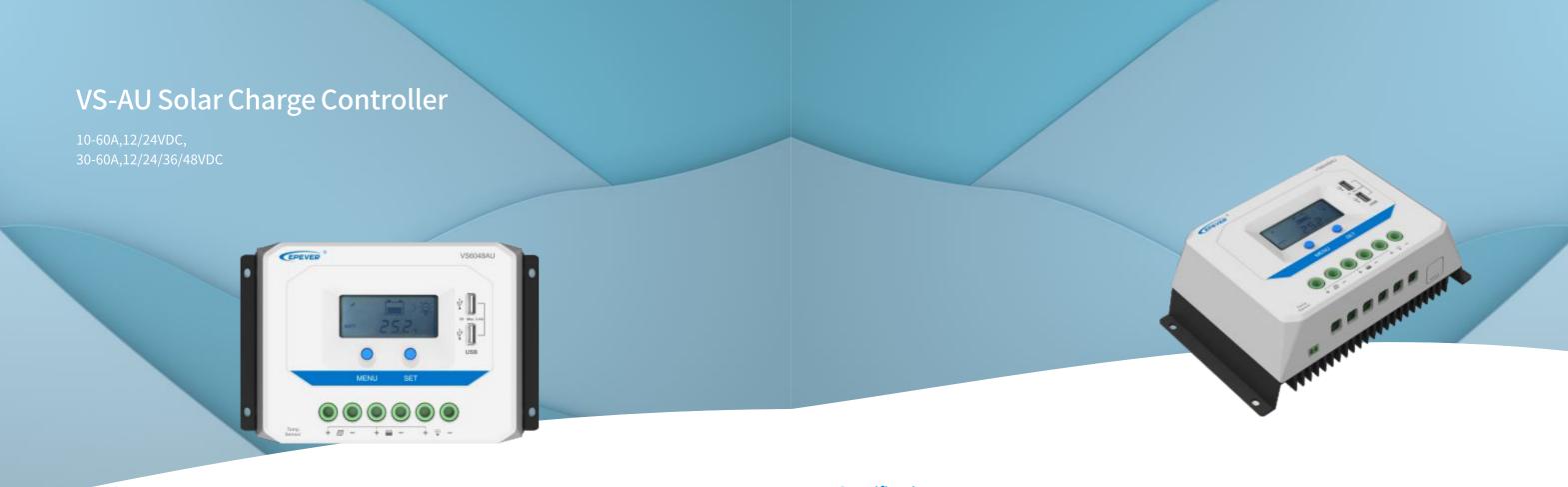
LS-EPD series adopts a digital tube menu control design. The waterproof design is mainly considered to be used in harsh environments. It is widely applied to folding panels, outdoor camping, field automatic detection equipment, traffic lights, solar street lights, courtyard light systems, etc.

### Features:

- \*Series PWM charging mode
- \*Multiple load control modes
- \*Extensive electronic protection
- \*Battery type: sealed battery
- \*LED indicators for situation indication and programming
- \*Fully encapsulated PCB, IP67 protection
- \*Adopt high-quality international brand components

### Specifications

Model	LS1024EPD	LS2024EPD				
Nominal system voltage	12/24VDC Auto					
Battery type	Sealed	battery				
Battery input voltage range	8~	32V				
Rated charge current	10A	20A				
Rated discharge current	10A	20A				
Max. PV open circuit voltage	50	OV				
Equalization voltage	14.8V(12V);	29.6V(24V)				
Boost voltage	14.4V(12V);28.8V(24V)					
Float voltage	13.7V(12V);27.4V(24V)					
Low voltage reconnect voltage	12.6V(12V);	25.2V(24V)				
Low voltage disconnect voltage	11.2V(12V);	22.4V(24V)				
Self-consumption	12V:≤4.58mA	; 24V:≤6.01mA				
Temperature compensation	-5mA/°C/	2V(25°C)				
Enclosure	IP67					
Grounding	Common Positive					
Operating temperature range	-35°C∼+50°C					
Dimensions(LxWxH)(mm)	108.5×75×25.6					
Net Weight	410g 435g					



VS-AU series is a PWM charge controller with LCD display and two USB ports. When the gap between solar panel working voltage and battery voltage is not big, choosing this PWM series is an equally reliable but more cost-effective solution. It is widely applied to rural Electrification and home power systems etc.

### Features:

- \*Series PWM charging mode
- \*Full power working at a working temperature range
- \*Multiple load control modes
- ${}^{\star} Adopt\ high\ quality, high-reliability\ international\ brand\ components$
- \*Double USB design
- \*Segment LCD display design
- \*Real-time energy statistics function
- ${}^\star \mathsf{Extensive} \ \mathsf{electronic} \ \mathsf{protection}$

### **Specifications**

Model	VS1024AU	VS2024AU	VS3024AU	VS3048AU	VS4524AU		VS6024AU	
Nominal system voltage	12/24VDC Auto	12/24VDC Auto	12/24VDC Auto	12/24/36/48VDC Auto	12/24VDC Auto	12/24/36/48VDC Auto	12/24VDC Auto	12/24/36/48VDC Auto
Battery type		Sealed(Default)/Gel/Flooded						
Battery input voltage range	9V~32V	9V~32V	9V~32V	9V~64V	9V~32V	9V~64V	9V~32V	9V~64V
Rated charge current	10A	20A	30A	30A	45A	45A	60A	60A
Rated discharge current	10A	20A	30A	30A	45A	45A	60A	60A
Max. PV open circuit voltage	50V	50V	50V	96V	50V	96V	50V	96V
Equalization voltage		Sealed:14.6V,Flooded:14.8V						
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V							
Float voltage	Gel/Sealed/Flooded:13.8V							
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V							
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V							
Self-consumption	≤9.2mA/12V;≤11.7mA/24V;≤14.5mA/36V;≤17mA/48V							
USB output	5VDC/2.4A(Total)							
Temperature compensation	-3mV/°C/2V (25°C)							
Relative humidity	≤95%, N.C.							
Enclosure	IP30							
Grounding	Common Positive							
Operating temperature range	-25°C∼+55°C							
Dimensions(LxWxH)(mm)	142×85×41.5	160×94.9×49.3	181×100.9×59.8	181×100.9×59.8	194×118.4×63.8	194×118.4×63.8	214x128.7x72.2	214x128.7x72.2
Net Weight	0.22kg	0.35kg	0.55kg	0.58kg	0.76kg	0.88kg	1.02kg	1.04kg
Net Weight	0.22kg	0.35kg	0.55kg	0.58kg	0.76kg	0.88kg	1.02kg	1.04kg

## VS-BN Solar Charge Controller

10-60A,12/24VDC, 45-60A,12/24/36/48VDC



### Overview:

VS-BN series is the PWM charge controller with dot matrix LCD display and RS485 communication interface. It is widely applied to off-grid system which needs high reliability and quality products, such as small power systems, mobile lighting, monitoring system, etc.

### Features:

- \*Series PWM charging mode
- \*Dot-matrix LCD display, integrated menu display, and operation
- \*Excellent EMC design
- \*Multiple load control modes
- \*Real-time energy statistics
- \*Extensive electronic protection
- \*Real-time data monitoring and parameters setting
- ${}^{\star}\mathsf{Standard}\,\mathsf{Modbus}\,\mathsf{communication}\,\mathsf{protocol}\,\mathsf{with}\,\mathsf{RS485}\,\mathsf{interface}$

### **Specifications**

Model	VS1024BN	VS2024BN	VS3024BN	VS4524BN	VS6024BN	VS4548BN	VS6048BN
Nominal system voltage	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24VDC/Auto	12/24/36/48VDC/Auto	12/24/36/48VDC/Auto
Battery type	Sealed(Default)/Gel/Flooded/User						
Battery input voltage range	8V~32V	8V~32V	8V~32V	8V~32V	8V~32V	8V~64V	8V~64V
Rated charge current	10A	20A	30A	45A	60A	45A	60A
Rated discharge current	10A	20A	30A	45A	60A	45A	60A
Max. PV open circuit voltage	48V	48V	48V	48V	48V	96V	96V
Equalization voltage		Sealed:14.6V,Flooded:14.8V,User-defined:9-17V					
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V						
Float voltage	Gel/Sealed/Flooded:13.8V,User-defined:9-17V						
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V,User-defined:9-17V						
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V,User-defined:9-17V						
Self-consumption	≤15mA@12V;≤13mA@24V;≤9mA@36V;≤8mA@48V						
Temperature compensation	-3mV/°C/2V (Default)						
Relative humidity	≤95%(N.C.)						
Enclosure	IP30						
Communication interface	RS485(RJ45)						
Grounding	Common negative						
Operating temperature range	-25°C~+55°C						
Dimensions(LxWxH)(mm)	162×87×39.5	162×102×49.5	200.6×105.8×57.7	200.6×111.8×58.6	204.8×131.9×67	204.8×122×66.6	204.8×173.9×63.8
Net Weight	0.3Kg	0.4Kg	0.7Kg	0.8Kg	1.3Kg	1.2Kg	1.6Kg



LS-E/EU series is a reliable, stable, and economical solar charge controller, easy to operate. Based on the LS-E series, the LS-EU series adds a +5V/1.2A USB terminal output which can charge mobile phones, power DC fans, and other DC electronic devices.

### Features:

- \*Series PWM charging mode
- ${}^\star LED\ indicator\ indicates\ battery\ situation$
- ${}^{\star}\mathsf{Battery}\,\mathsf{temperature}\,\mathsf{compensation}\,\mathsf{function}$
- \*Extensive electronic protection
- \*USB ports available (LS-EU series only)
- \*User-friendly design buttons
- ${}^{\star} Industrial \, quality \, standard \, design$

### Specifications

Model	LS1024E	LS2024E	LS0512EU	LS1012EU	LS1024EU	LS2024EU	LS3024EU
Nominal system voltage	12/24VDC Auto	12/24VDC Auto	12VDC	12VDC	12/24VDC Auto	12/24VDC Auto	12/24VDC Auto
Battery type		Sealed(Default)/Gel/Flooded					
Battery input voltage range	8~32V	8~32V	8~16V	8~16V	8~32V	8~32V	8~32V
Rated charge current	10A	20A	5A	10A	10A	20A	30A
Rated discharge current	10A	20A	5A	10A	10A	20A	30A
Max. PV open circuit voltage	50V	50V	30V	30V	50V	50V	50V
Equalization voltage		1	5	Sealed:14.6V,Flooded:14.8V			
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V						
Float voltage	Gel/Sealed/Flooded:13.8V						
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V						
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V						
Self-consumption	12V≤5mA; 24V≤7mA						
Temperature compensation	-5mV/°C/2V						
Relative humidity	≤95%,(N.C.)						
Enclosure	IP30	IP30	IP20	IP20	IP20	IP20	IP20
Grounding	Common Positive						
Operating temperature range	-35°C~50°C						
Dimensions(LxWxH)(mm)	101.2×67×21.8	128×85.6×34.8	109.7×65.5×20.8	120.3×67×21.8	120.3×67×21.8	148×85.6×34.8	148×106.8×43.7
Weight	0.08kg	0.15kg	0.09kg	0.10kg	0.10kg	0.18kg	0.29kg



LS-LPLW series is PWM solar charge controller that combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed. It adopts the 2.4G wireless communication method, to enable cross-obstacle communication when the controller is installed inside the LED lamp or the lighting pole.

### Features:

- \*2.4G wireless communication design
- \*PWM charging mode
- \*Support lead-acid and lithium-ion batteries
- \*Lithium battery self-activating function
- \*Intelligent power derating to ensure 365 days lighting on
- \*Multiple load control modes (Including midnight working mode)
- \*Ultra-low power consumption mode (4mA)
- \*Customizing parameter by password verify
- \*Automatic load test feature during installation
- \*Ip68 protection class (1.5 meters, 72h)

### Specifications

Model	LS101260LPLW	LS2024120LPLW			
Nominal system voltage	12VDC	12/24VDC/Auto			
Battery type	Lead-acid (Sealed/Gel/Flooded)/Lithium (LiFePO4/Li(NiCoMn)O2)/User				
Battery input voltage range	9V~16V	9V~32V			
Rated charge current	10A	20A			
Max. output power	60W	60W/12V 120W/24V			
Max. PV open circuit voltage	30V	50V			
Max. output current	4.0A	4.0A			
Output voltage range	(Max. Battery Voltage +2V)∼60V	(Max. Battery Voltage +2V)∼60V			
Maximum output efficiency	96%	96%			
Output current control accuracy	≤30mA				
Equalization voltage	Sealed:14.6V,Flooded:14.8V,User-defined:9-17V				
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V				
Float voltage	Gel/Sealed/Flooded:13.8V,User-defined:9-17V				
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V,User-defined:9-17V				
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V,User-defined:9-17V				
Self-consumption	≤19mA(12V); ≤35mA(24V)	≤19mA(12V); ≤35mA(24V)			
Enclosure	IP68(1.5m,72h)	IP68(1.5m,72h)			
Communication interface	2.4G	2.4G			
Operating temperature range	-40°C∼+55°C	-40°C∼+55°C			
Dimensions(LxWxH)(mm)	87x63x24.8	108.5x118x25.6			
Net Weight	0.20kg	0.40kg			

### Accessories (optional)







FC-02 Super Parameter Programmer



RC-11 2.4G Remote Controller

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.



LS-LPLI series is PWM solar charge controller combines solar charge controller and LED constant current driver into one unit. It has multiple load control modes which are ideal for various solar LED Lighting applications, especially when a dimming function is needed.

### Features:

- \*Infrared wireless communication design
- \*PWM charging mode
- \*Support lead-acid and lithium-ion batteries
- \*Lithium battery self-activating function
- \*Intelligent power derating to ensure 365 days lighting on
- \*Multiple load control modes (including midnight working mode)
- \*Automatic load test feature during installation
- \*Extensive electronic protection
- \*IP68 protection class (1.5 meters, 72h)

### **Specifications**

Model	LS101260LPLI	LS2024120LPLI			
Nominal system voltage	12VDC	12/24VDC			
Battery type	Lead-acid (Sealed/Gel/Flooded)/Lithium (LiFePO4/Li(NiCoMn)O2)/User				
Battery input voltage range	9V~16V	9V~32V			
Rated charge current	10A	20A			
Max. output power	60W	60W/12V 120W/24V			
Max. PV open circuit voltage	30V	50V			
Max. output Current	4.0A	4.0A			
Output voltage range	(Max. Battery Voltage +2V)~60V	(Max. Battery Voltage +2V)∼60V			
Maximum output efficiency	96%	96%			
Output current control accuracy	≤2%	≤2%			
Equalization voltage	Sealed:14.6V,Flooded:14.8V,User-defined:9-17V				
Boost voltage	Gel:14.2V,Sealed:14.4V,Flooded:14.6V,User-defined:9-17V				
Float voltage	Gel/Sealed/Flooded:13.8V,User-defined:9-17V				
Low voltage reconnect voltage	Gel/Sealed/Flooded:12.6V,User-defined:9-17V				
Low voltage disconnect voltage	Gel/Sealed/Flooded:11.1V,User-defined:9-17V				
Self-consumption	≤18mA(12V);	≤23mA(24V)			
Enclosure	IP68(1.5m,72h)				
Communication interface	11	IR .			
Operating temperature range	-40°C∼	~+55°C			
Dimensions(LxWxH)(mm)	87x63	3x24.8			
Net Weight	0.21kg				

### Accessories (optional)



eBox-WiFi&2.4G-02 WIFI Serial Server



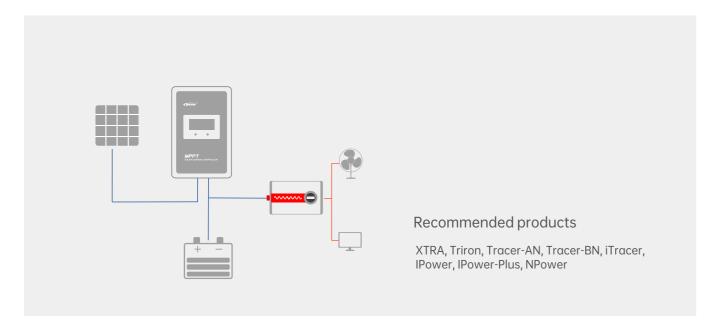
FC-01 Super Parameter Programmer

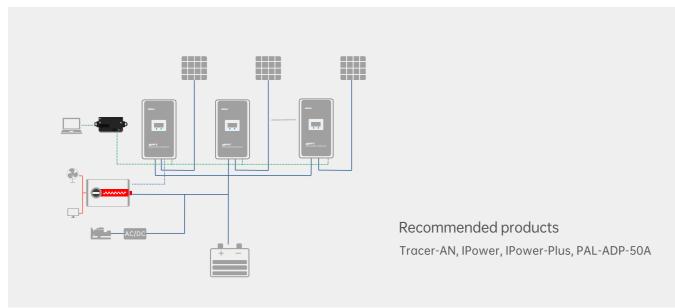


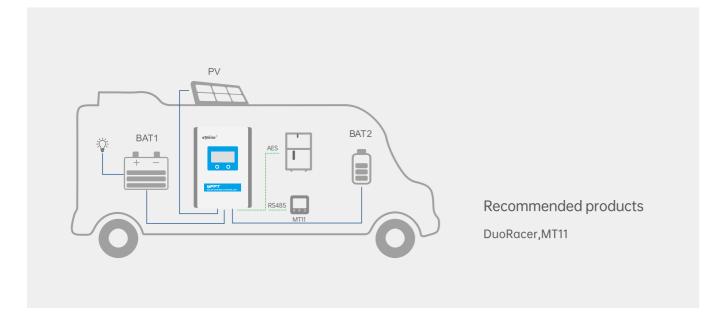
RC-10 IR Remote Controller

EPEVER can provide many accessories to meet different applications. Please contact sales for more accessories information.

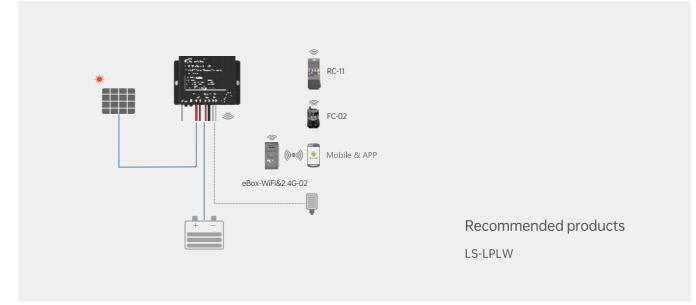
### **EPEVER Solutions**

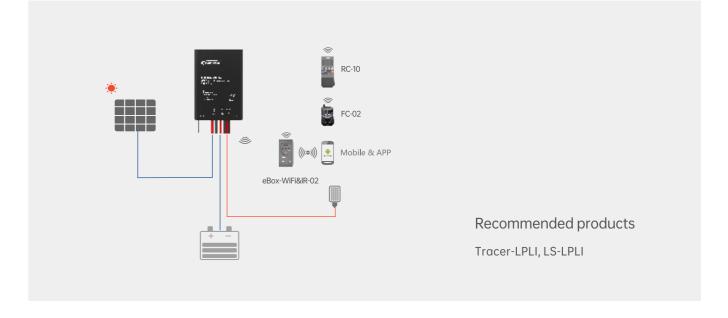












### **EPEVER Accessories**



Parallel Adapter

PAL-ADP-50AN Input voltage:5VDC Dimensions:151.5×69.9×25.7mm Weight:91.4g



Remote Meter

MT50 Input voltage:5VDC Dimensions:114×114mm Weight: 0.32g



IR Remote Controller

RC-10 Input voltage:3VDC Dimensions:138×58×21mm Weight:69g



Extension Module

RS485-1M2S Input voltage:5VDC Dimensions:121×88×27.5mm Weight:121.8g



Remote Meter

MT75 Input voltage:5VDC Dimensions:193×95×48mm Weight: 0.29kg



Remote Meter

MT11 Input voltage:5VDC Dimensions:114×114mm Weight:0.11kg



PC Communication Cable

CC-USB-RS485-150U-3.81



PC Communication Cable

CC-USB-RS485-150U-4LLT



Serial Device Server

EPEVER TCP 306 Input power:5V~36VDC Dimensions:98.0mmx86.0mmx25.0mm Weight:205g



WIFI Serial Server

EPEVER WiFi 2.4G RJ45 D Input power:5VDC Dimensions:63mm x 19mm x 10mm Weight:7.7g



Remote Temperature Sensor



PC Communication Cable

RTS300R47K3.81A

CC-USB-RS485-150U