MPPT Solar Charge Controller

PC1800F SERIES (60A/80A/100A)

MUST
MPPT
solar charge controller
MUST
MPPT solar charge controller
PV
BATT
FAULT

MPPT (Maximum Power Point Tracking)Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.

Max charging current
60A / 80A / 100A

Fan cooling

Multi protection

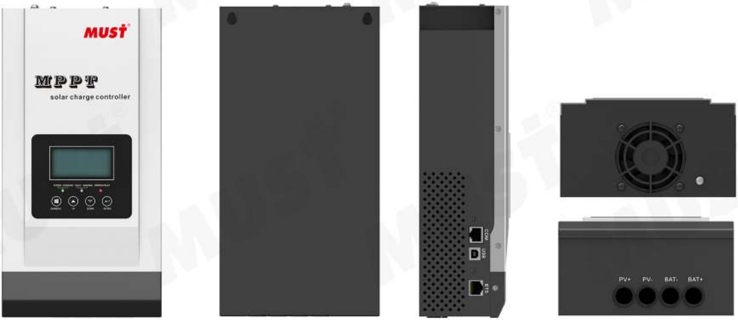
Battery smart
charge design

Battery DC voltage
12V/24V/48V(Auto detection)
36V(Setting)

Peak conversion efficiency : 98%
(MPPT Efficiency 99%)

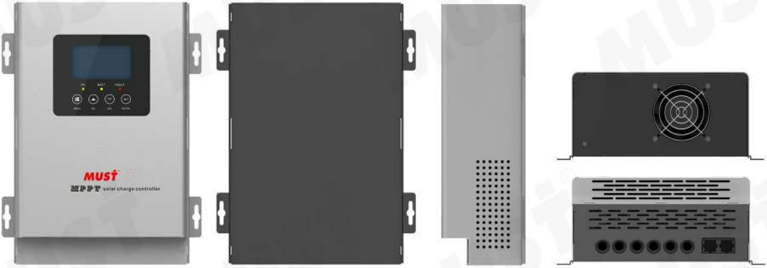
Charging set points
Absorption stage
Float stage

Appearance


MUST
MPPT
solar charge controller
COM
USB
BTS
PV+
PV-
BAT-
BAT+

(60A / 80A)

MUST®


MUST
MPPT solar charge controller

(100A)

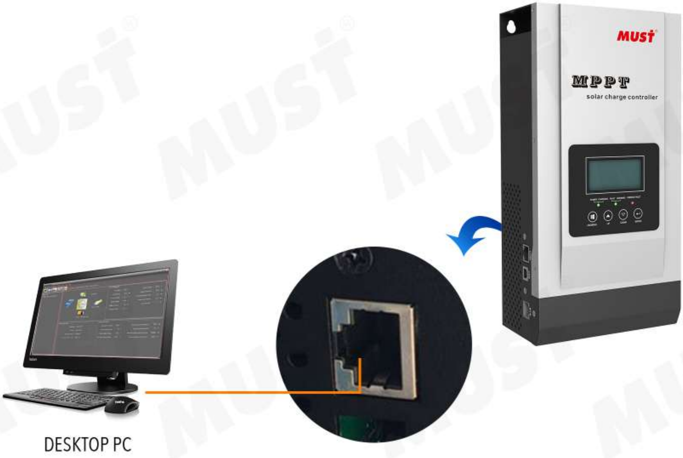
PRODUCT FEATURES

SMART & INTELLIGENT FEATURES

- LCD display , easy to operate on LCD screen
- Multi stage charging (3-stage charging , parallel charging and equalized charging function)
- BTS - Battery remote temperature sensor terminal
- Enable to charge Li-thium, Gel , lead-acid battery
- With RS485 & USB communication port
- Protection: PV array short circuit, PV reverse polarity, Battery reverse polarity, Over charging, Output short circuit

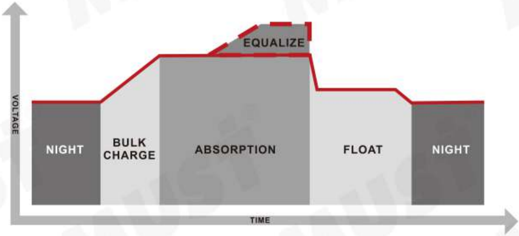
RS485/USB Communication

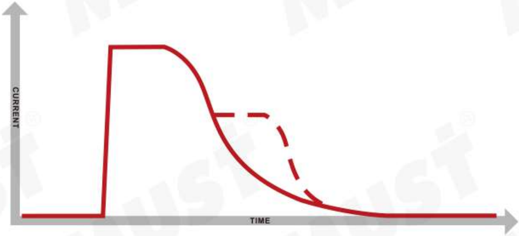
The default communication of the controller is RS485 port.You can use supplied cable to connect RS485,USB port of controller to PC.It can be used for monitoring or upgrade the firmware in short distance.


MUST
MPPT
solar charge controller
DESKTOP PC

Equalize stage charging function

Equalization function reverses the buildup of negative chemical effects like stratification,a condition where acid concentration is greater at the bottom of the battery than at the top.Equalization also helps to remove sulfate crystals that might have built up on the plates.





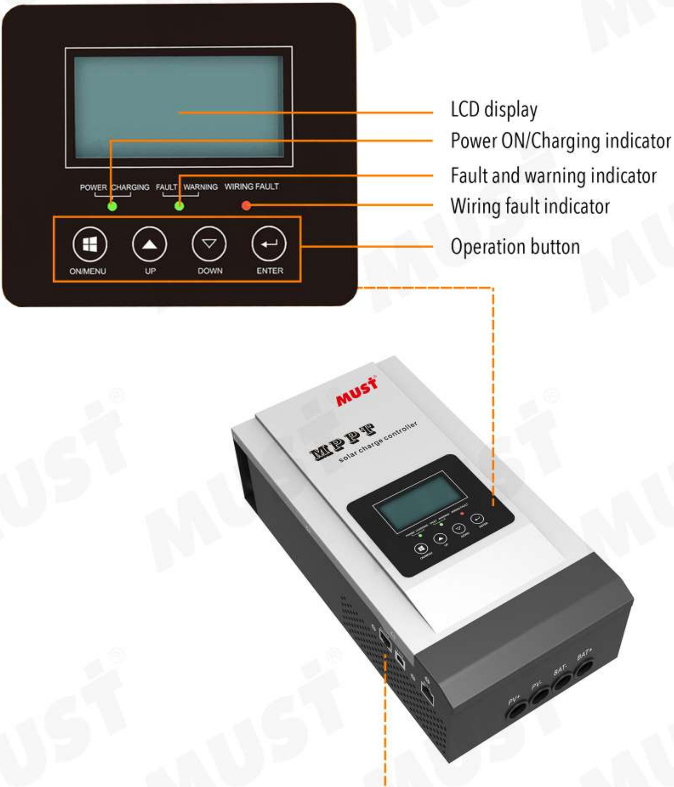
Battery reverse protection

TThere's a battery reverse protection function in the board, then the controller will be perfectly protected even installer or user connect the battery in reverse pole accidentally

PRODUCT DETAILS

MUST HELP YOU CONTROL EVERY DETAIL

Details reflect quality


POWER
CHARGING
FAULT
WARNING
WIRING FAULT
ON/MENU
UP
DOWN
ENTER
MUST
MPPT
solar charge controller
PV+
PV-
BAT-
BAT+

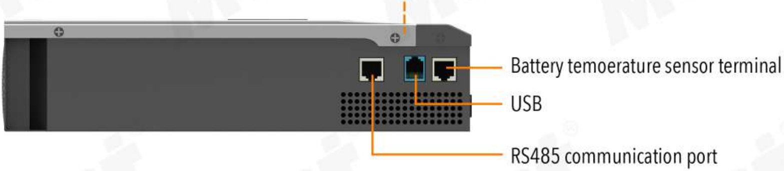
LCD display

Power ON/Charging indicator

Fault and warning indicator

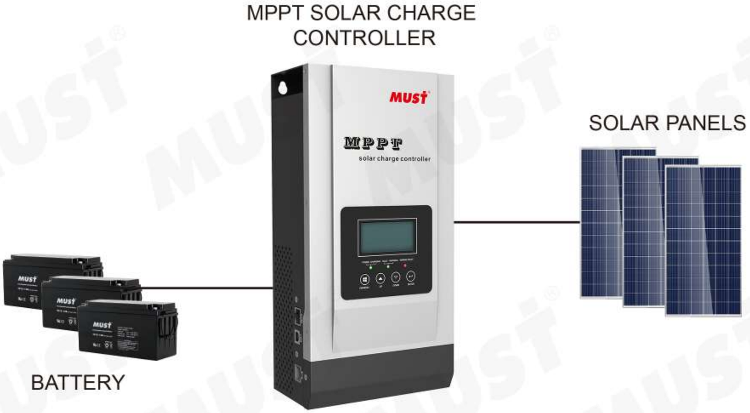
Wiring fault indicator

Operation button

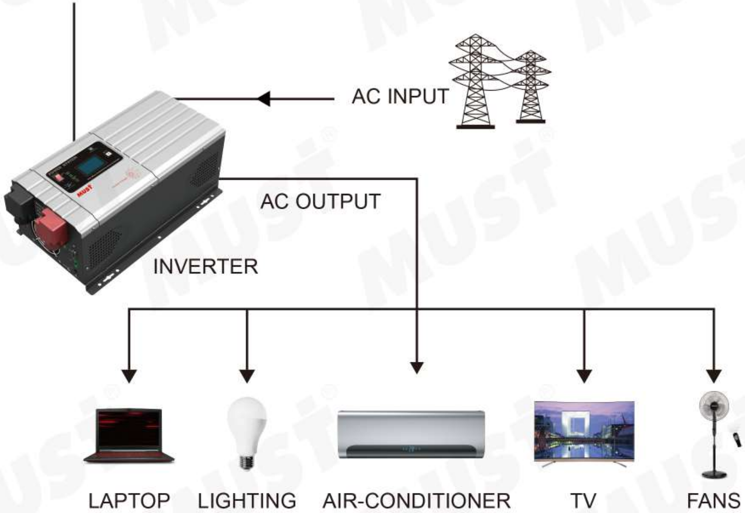

Battery temoerature sensor terminal
USB
RS485 communication port

SOLAR SYSTEM CONNECTION

INVERTER + SOLAR CHARGE CONTROLLER + BATTERY +
SOLAR PANELS + GRID + APPLICATION LOADS


MPPT SOLAR CHARGE CONTROLLER
MUST
MPPT
solar charge controller
SOLAR PANELS
BATTERY

MUST


AC INPUT
AC OUTPUT
INVERTER
LAPTOP
LIGHTING
AIR-CONDITIONER
TV
FANS

PC1800F solar inverter system， it can work with inverter , battery and solar panel , as a complete solar system and back up power for normal home power demands , which take use of sunshine free and save lots of electricity bill for you . This kind of solar inverter systems are widely used in home ,farm ,school,shops etc .

PRODUCT PARAMETERS

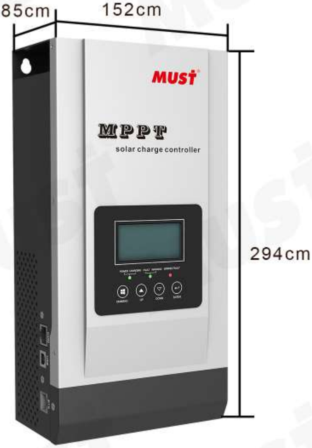
MAKE SURE EACH PARAMETER IS TRUE

Learn more about the product

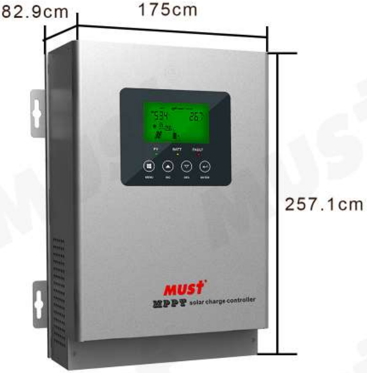
MUST

MODEL		PC18-6015F		PC18-8015F		PC18-10015F
Nominal Battery System Voltage		12V/24V/48VDC (Auto detection); 36V (Setting)				
CONTROLLER INPUT	Battery Voltage	12V	24V	36V	48V	48V
	Maximum Solar Input Voltage	100V	145V			
	PV Array MPPT Voltage Range	15~95V	30~130V	45~130V	60~130V	60~130V
	Maximum Input Power	12Volt-940W 24Volt-1880W 36Volt-2820W 48Volt-3760W		12Volt-1250W 24Volt-2500W 36Volt-3750W 48Volt-5000W		12Volt-1550W 24Volt-3100W 36Volt-4650W 48Volt-6200W
BATTERY	Charging Set Points	Absorption Stage			Float Stage	
	Flooded Battery	14.2V/28.4V/42.6V/56.8V			13.7V/27.4V/41.1V/54.8V	
	AGM (Default)	14.4V/28.8V/43.2V/57.6V			13.7V/27.4V/41.1V/54.8V	
	Over-charging Voltage	15.5V/30.0V/45.0V/60.0V				
	Over-charging Comeback Voltage	14.5V/29.5V/44.5V/59.0V				
	Battery Defect Voltage	10.0V/17.0V/25.5V/34.0V				
	Temperature Compensation Conefficient	-5mv / ˚C /cell (25˚C vef)				
	Peak Conversion Efficiency	98% (MPPT Efficiency 99%)				
	Max Charging Current	60amps continuous @ 40˚C ambient		80amps continuous @ 40˚C ambient		100amps continuous @ 40˚C ambient
GENERAL SPECIFICATION	Radiating Mode	Fan cooling				
DISPLAY & PROTECTION	Protections	Solar high voltage disconnect Solar high voltage reconnect Battery high voltage disconnect Battery high voltage reconnect High temperature disconnect High temperature reconnect				
MECHANICAL SPECIFICATIONS	Mounting	Wall mount				
	Machine Dimension (W*H*D)	152*85*294 mm (per pcs)				175*82.9*257.1
	G.W (kg)	3kg/pcs				
	Package Dimension (W*H*D)	625*366*232 mm (4pcs / Carton)				/
	Gross Weight (kg)	14kg				
OTHER	Environmental Rating	Indoor				
	Operation Temperature Range	-10~55˚C				
	Ambient Humidity	0~90% relative humidity (non-condensing)				
	Altiude	≤3000m				

Size


85cm
152cm
294cm
MUST
MPPT
solar charge controller

(60A / 80A)


82.9cm
175cm
257.1cm
MUST
MPPT solar charge controller

(100A)

Package

MPPT Solar Charge Controller
User's Manual

User Manual

Communication Cable

Warranty registration card
DATE
SERVICE RECORD
TRANSACTOR

Warranty Card

BTS Cable

MUST

<table>
<tr><th colspan="6">COLOR BOX DIMENSION</th></tr>
<tr><td colspan="3">COLOR BOX SIZE : 359*149*217MM (1PC)</td><td colspan="3">CARTON SIZE : 625*366*232MM （4PCS/CARTON）</td></tr>
<tr><th colspan="6">LOADING</th></tr>
<tr><td colspan="2">20GP</td><td colspan="2">40GP</td><td colspan="2">40HQ</td></tr>
<tr><td colspan="2">3000pcs</td><td colspan="2">6000pcs</td><td colspan="2">7200pcs</td></tr>
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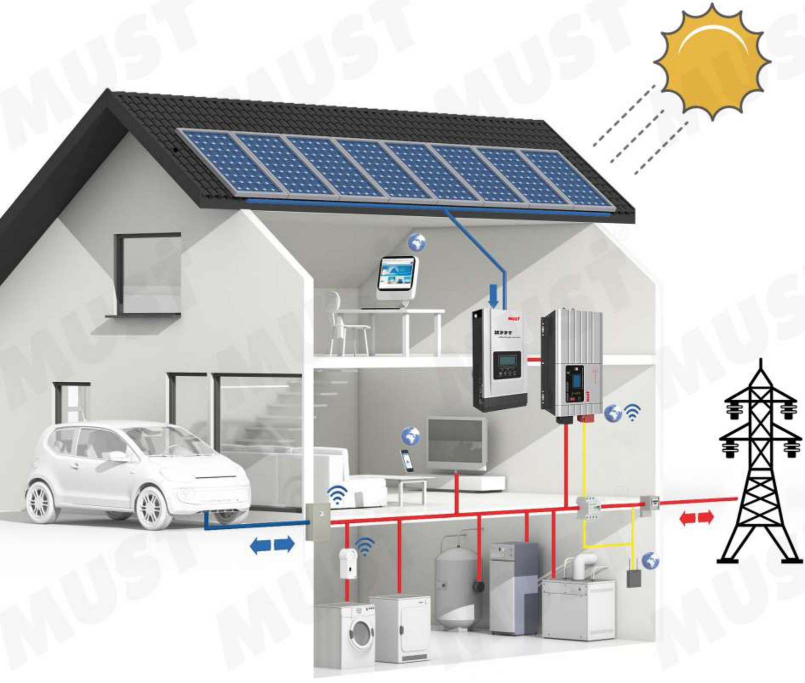
SOLAR CHARGE CONTROLLER
CHARGE CONTROLLER
MPPT
MPPT
Solar Charge Controller

Packaging

PRACTICAL APPLICATION

APPLICABLE PLACE



The solar charge controller is an automatic control device , it can be used in all solar power systems to control solar panel array to charge batteries .

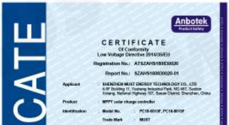
Solar Inverter System Connection: Power Inverter + Solar Charge Controller + Battery + Solar Panels + Grid + Applicaiton Loads

PROJECT REFERENCE

PROFESSIONAL CERTIFICATION

CE FCC ROHS ISO9001

High quality and high standard


CATE
Anbotek
Product Safety

CERTIFICATE
Of Conformity
Low Voltage Directive 2014/35/EU

Registration No.: ATSZAHS180830020

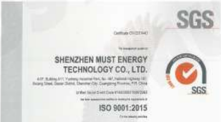
Report No.: SZAHS180830020-01

Applicant : SHENZHEN MUST ENERGY TECHNOLOGY CO., LTD
4-8F Building 11, Yusheng Industrial Park, NO 467, Section Xixiang, National Highway 107, Baoan District, Shenzhen, China

Product : MPPT solar charge controller

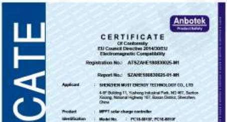
Identification : Model No. : PC18-6015F, PC18-8015F

Trade Mark : MUST



SHENZHEN MUST ENERGY TECHNOLOGY CO., LTD.

ISO 9001:2015


CATE
Anbotek
Product Safety

CERTIFICATE
Of Conformity
EU Council Directive 2014/30/EU
Electromagnetic Compatibility

Registration No.: ATSZAHE180830025-M1

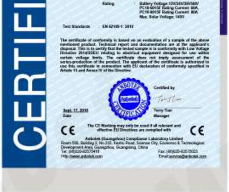
Report No.: SZAHE180830025-01-MH

Applicant : SHENZHEN MUST ENERGY TECHNOLOGY CO., LTD
4-8F Building 11, Yusheng Industrial Park, NO 467, Section Xixiang, National Highway 107, Baoan District, Shenzhen, China

Product : MPPT solar charge controller

Identification : Model No. : PC18-8015F, PC18-8015F

MUST



Rating : Battery Voltage:12V/24V/36V/48V
PC18-6015F Rating Current: 60A
PC18-8015F Rating Current: 80A
Max. Solar Voltage: 145V

Test Standards : EN 62109-1: 2010

The certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical report and documentation are at the applicant's disposal. This is to certify that the tested sample is in conformity with Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. The certificate does not imply assessment of the series-production of the product. The applicant of the certificate is authorized to use this certificate in connection with EU declaration of conformity specified in Article 13 and Annex IV of the Directive.

Certified by

Terry Tian
Manager

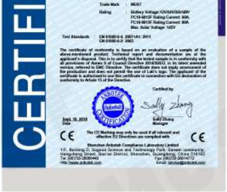
Sept. 17, 2018
Date

The CE Marking may only be used if all relevant and effective EU Directives are complied with

Anbotek (Guangzhou) Compliance Laboratory Limited
Room 508, Building 3, No.232, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China
Tel: (86)020-82575416 Fax: (86)020-82575023
Http://www.anbotek.com Email:service@anbotek.com

CERTIFI
CE
CE

IAF
UKAS
SGS



Trade Mark : MUST

Rating : Battery Voltage:12V/24V/36V/48V
PC18-6015F Rating Current: 60A
PC18-8015F Rating Current: 80A
Max. Solar Voltage: 145V

Test Standards : EN 61000-6-4: 2007+A1: 2011
EN 61000-6-2: 2005

The certificate of conformity is based on an evaluation of a sample of the above-mentioned product. Technical report and documentation are at the applicant's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex II of Council Directive 2014/30/EU, in its latest amended version, referred to EMC Directive. The certificate does not imply assessment of the production and does not permit the use of Lab's logo. The applicant of the certificate is authorized to use this certificate in connection with EU declaration of conformity to Article 15 of the Directive.

Certified by

Sally Zhang

Sally Zhang
Manager

Sept. 18, 2018
Date

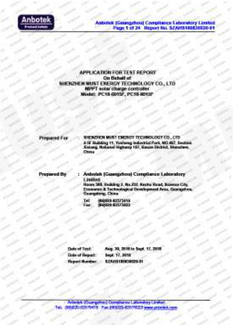
The CE Marking may only be used if all relevant and effective EU Directives are complied with

Shenzhen Anbotek Compliance Laboratory Limited
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China 518102
Tel: (86)755-26066440 Fax: (86)755-26014772
Http://www.anbotek.com Email: service@anbotek.com

CERTIFI
CE
CE

TEST REPORT

Have quality inspection to use with confidence



Anbotek (Guangzhou) Compliance Laboratory Limited
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APPLICATION FOR TEST REPORT
On Behalf of
SHENZHEN MUST ENERGY TECHNOLOGY CO., LTD
MPPT solar charge controller
Model: PC18-6015F, PC18-8015F

Prepared For : SHENZHEN MUST ENERGY TECHNOLOGY CO., LTD
4-5F Building 11, Yusheng Industrial Park, NO.467, Section Xixiang, National Highway 107, Baoan District, Shenzhen, China

Prepared By : Anbotek (Guangzhou) Compliance Laboratory Limited
Room 508, Building 3, No.232, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China
Tel: (86)020-82575416
Fax: (86)020-82575023

Date of Test: Aug. 30, 2018 to Sept. 17, 2018
Date of Report: Sept. 17, 2018
Report Number: SZAHS180830020-01

Anbotek (Guangzhou) Compliance Laboratory Limited
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Product Safety

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EN 62109-1

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Product Safety

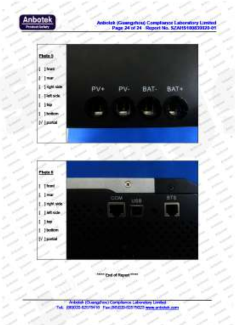

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Photo 5

Photo 6

***** End of Report *****

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Product Safety
[ ] front
[ ] rear
[ ] right side
[ ] left side
[ ] top
[ ] bottom
[V] partial
PV+
PV-
BAT-
BAT+
COM
USB
BTS