

Smart-MPPT series

MPPT Solar charge controller

10/15/20A

Datasheet

	ALE-MPPT1050	ALE-MPPT1575	ALE-MPPT2075
System Voltage	12V	12V/24V automatical recognition	
Max Charging Current	10A	15A	20A
MPPT Charging Voltage	< 14.5V @25°C	< 14.5V/29V @25°C	
Boost Voltage	14.5V @25°C	14.5V/29V @25°C	
Equal Voltage	14.8V @25°C (Liquid)	14.8V/29.6V @25°C (Liquid)	
Float Voltage	13.7V @25°C	13.7V/27.4V @25°C	
Charging Voltage Target		---	
Charging Voltage Recovery		---	
Low Voltage Disconnect	10.8~11.8V, SOC1~5 (Programmable)	10.8~11.8V/21.6~23.6V SOC1~5 (Programmable)	
Low Voltage Reconnect	11.4~12.8V (Programmable)	11.4~12.8V/22.8~25.6V (Programmable)	
Over Voltage Protection	15.5V	15.5V/31V	
Max Battery Voltage	25V	35V	
Temperature Compensation	-4.17mV/K per cell (Boost, Equal), -3.33mV/K per cell (Float)		
Battery Type	AGM, Liquid, GEL (Programmable)		
Max Solar Voltage	45V	55V	
Max Input Power	130W	200W/400W	260W/520W
Day/Night Threshold	3~8V (Programmable)	3~20V (Programmable)	
Day/Night Delay Time	0~30min (Programmable)		
MPPT Tracking Range	(Battery Voltage + 1V) ~ Voc*0.9		
Output Current	10A	15A	20A
Max Tracking Efficiency	> 99.9%		
Max Charge Conversion	96%	97%	
Self Consumption	6mA		
Dimensions	85.8*81*23.1mm	85.8*145*30mm	85.8*145*42.5mm
Weight	280g	600g	720g
Wire Size	2.5mm ²	4mm ²	
Ambient Temperature	-35~+60°C		
Ambient Humidity	0~100%RH		
Protection Degree	IP67		
Max Altitude	4000m		