

AC/DC Hybrid Series

MEH160/MEH200/EH120/EH120-ES/EL2415



Performance characteristics

- Advanced MPPT charging technology, 15% to 30% higher than PWM charging efficiency.
- Multi-peak tracking technology, higher tracking accuracy under shading conditions.
- Boosting constant current algorithm, accurate load efficiency control.
- Charge with accurate constant pressure algorithm, charging ripple will be lower and the service life of lithium battery will be extended.
- Historical status record.
- Available for all types of batteries.
- Multi-stage induction setting, more flexible lighting and electric quantity control.

Parameters

Models	MEH160	MEH200	EH120	EH120-ES	EL2415	Parameters adjustable
Zero load loss	R : <10mA/12V ; < 7mA/24V W : < 30mA/12V ; < 15mA/24V		R : <10mA/12V ; < 15mA/24V W : < 35mA/12V ; < 40mA/24V			
System voltage			12V/24V			√ Lead
Max load power	80W/12V ; 160W/24V ; 100W/12V ; 200W/24V		60W/12V ; 120W/24V		180W/12V ; 360W/24V	
Load output voltage	15V ~ 75V		15V ~ 60V ; 30V ~ 60V/24V			
Load periods			8 periods + predawn		always on mode 9 load working modes	
Maximum charging current	15A	20A			15A	
Solar power max input efficiency	200W/12V;400W/24V		260W/12V;520W/24V		225W/12V;450W/24V	
Load circuit voltage drop (EL Series)	/		/		≤ 500mV	
Solar panel input voltage	≤ 95V		≤ 55V			
Load conversion efficiency			90% ~ 96%			
Load current accuracy			< 3%			
Overvoltage			Lead-acid battery:16V; Lithium battery:charge voltage+2V; x2/24V			
Equalizing charge voltage			Lead-acid battery:14.6V; Lithium battery:No equalizing charge; x2/24V			
Equalizing charge interval			30 days			
Boost charge voltage (Lead-acid)			7.50V ~ 17.00V settable; x2/24V			√ 14.4V
Charging voltage (Lithium battery)			7.50V ~ 17.00V settable; x2/24V			√ 14.4V
Floating charge voltage (Lead-acid)			7.50V ~ 17.00V settable; x2/24V			√ 13.8V
Charge return voltage (Lithium battery)			7.50V ~ 17.00V settable; x2/24V			√ 13.8V
Over discharge voltage			7.50V ~ 17.00V settable; x2/24V			√ 11.0V
Over discharge return voltage			7.50V ~ 17.00V settable; x2/24V			√ 12.6V
Switching voltage			7.50V ~ 17.00V settable; x2/24V			√ 11.5V
DC voltage input range			10 ~ 14V/12V system; 20~ 28V/24V system			
Light control voltage			3V ~ 11V ; x2/24V			√ 5V
Temperature compensation coefficient			Lead-acid battery:-3.0mV/°C/2V; Lithium battery:No temperature compensation			
Light control delay			5s ~ 60s/2min ~ 60min			√ 10s
High temperature work			40°C ~ +90°C			√ 65°C
Low temperature charging			0°C ~ -35°C			√ -35°C
Operating temperature			-35°C ~ +65°C			
IP rating			IP67			
Weight (g)	780		300			
Dimensions (mm)	155*114*34		120*82*23			
Installation size (mm)	123*102		106*75			

Notice: -ES series products can be equipped with external body induction probe.