

# MPPT CONTROLLERS



## KEY FEATURES

- **NEW! Wider MPPT range** allows better compatibility with more panels
- Integrated **Maximum Power Point Tracking (MPPT)** capability increases performance by 20~25%.
- Intelligent 3-stage charging optimizes system performance.
- Designed for either 12V (max 300W) or 24V (max 600W) projects.
- Charging power up to **25A** to reduce overall charging time.
- Maximum efficiency up to 97%.
- Optional com port to program customized charging voltage
- Automatic load detection.
- Automatic battery voltage detection.
- Support all popular battery types including wet, sealed, AGM, Gel or NiCd batteries.
- Large LCD displays useful system parameter.
- Full battery protections (with LVD/LVR, HVD/HVR parameters).
- Suitable for vertical mounting.

### ARM-3012

### ARM-3024

ELECTRICAL SPECIFICATIONS		
MPPT Range @ Operating Voltage	15V~37V@12V	30V~66V@24V
Max PV Input Voltage	50V	75V
Max PV Input Current	18A	
Max PV Input Power	300W	600W
Recommended Battery Type	Sealed Lead-Acid Batteries, AGM or Gel	
Nominal Battery Voltage	12V	24V
Max Charging Current	25A	
Ripple Voltage	<± 1V	
Max Efficiency	0.97	
Standby Power	<1W	<2W
Charging Schemes	3 stages, bulk, absorption and floating	
Protections	Battery Reverse Polarity, Reverse Current at Night, LVD/LVR, HVD/HVR, Overload (>110%)	
LCD Indicator	Solar and Output Power, Battery Voltage, Charging Current, and Fault Conditions	
LED Indicator	3 LED	
GENERAL SPECIFICATIONS		
Conformity / EMC	CE / EN61000-6-1, EN61000-6-3	
Operating	-20°C~55°C	
Enclosure Type	Indoor, IP43	
Working Humidity	100%RH Max Non-Condensing	
Dimension	135*170*57.5mm	200*170*57.5mm
Weight	0.92Kg	1.85Kg

Table—Battery Type and Charging Voltage

	ARM-2012		ARM2024	
	BULK	FLOATING	BULK	FLOATING
WET	14.3V	13.2V	28.6V	26.4V
SEALED	14.3V	13.4V	28.6V	26.8V
GEL	14.3V	13.7V	28.6V	27.4V
NiCd	14.3V	14.0V	28.6V	28.0V

\*Product specifications are subject to change without prior notice. ARM Solar is a registered trademark of ARM Solar Inc.