



FLEXmax™ Micro Series

30A and 40A MPPT Charge Controllers



30A

40A



- Ultra-Thin Design with Natural Heat Dissipation
- 4-Stage Charge with Advanced MPPT Output
- Peak Conversion Efficiency of 97%
- High Tracking Efficiency of 99%
- Fast Sweeping Function of Entire I-V Curve
- Extensive Electronics Protection
- Diversified Load Control
- Open Standard MODBUS Protocol
- Optional Remote Meter Communications

The FLEXmax Micro Series of charge controllers incorporate maximum performance into a compact package.

The new FLEXmax Micro Series from OutBack Power extends the highly acclaimed FLEXmax charge controller family. Available in both 30A and 40A models, the FLEXmax Micro offers advanced Maximum Power Point Tracking (MPPT) technology—which can increase charge efficiency by up to 30%—in a charge controller designed for smaller battery and load current applications.

The FLEXmax Micro Series offers peak conversion efficiency of up to 98% and high tracking efficiency of up to 99%. The die-cast aluminum chassis is designed to provide natural heat dissipation, increasing operating efficiency.

The FLEXmax Micro works with Sealed, Gel, and Flooded batteries and incorporates a number of electronic protections including PV short circuit protection, PV current limiting protection, battery overcharge protection, battery reverse polarity protection and load short circuit protection.

Models:	FM-30	FM-40
Nominal System Voltage	12/24V auto work	12/24V auto work
Rated Battery Current	30A	40A
Rated Load Current	20A	20A
Maximum PV Open Circuit Voltage	150V	150V
Maximum Battery Voltage	32V	32V
Maximum PV Input Power	12V: 390W 24V: 780W	12V: 520W 24V: 1040W
Equalize Charging Voltage	Sealed: 14.6V Flooded: 14.8V User: 9-17V	Sealed: 14.6V Flooded: 14.8V User: 9-17V
Boost Charging Voltage	Gel: 14.2V Sealed: 14.4V Flooded: 14.6V User: 9-17V	Gel: 14.2V Sealed: 14.4V Flooded: 14.6V User: 9-17V
Float Charging Voltage	Gel / Sealed / Flooded: 13.8V User: 9-17V	Gel / Sealed / Flooded: 13.8V User: 9-17V
Low Voltage Reconnect Voltage	Gel / Sealed / Flooded: 12.6V User: 9-17V	Gel / Sealed / Flooded: 12.6V User: 9-17V
Low Voltage Disconnect Voltage	Gel / Sealed / Flooded: 11.1V User: 9-17V	Gel / Sealed / Flooded: 11.1V User: 9-17V
Self-Consumption	≤50mA (12V), ≤27mA(24V)	≤50mA (12V), ≤27mA(24V)
Grounding	Common negative	Common negative
Temperature Compensation	-3mV / °C / 2V	-3mV / °C / 2V
Communication Port	RS485 / RJ45 interface	RS485 / RJ45 interface
Dimensions (in/mm)	11.06 x 6.30 x 2.36 / 281 x 160 x 60	11.93 x 7.20 x 2.52 / 303 x 183 x 64
Terminal	16mm ²	25mm ²
Weight (lb/kg)	5.1 / 2.3	6.4 / 2.9
Enclosure	IP30	IP30
Working Temperature	-31 to 131°F / -35 to 55°C	-31 to 131°F / -35 to 55°C
Storage Temperature	-31 to 176°F / -35 to 80°C	-31 to 176°F / -35 to 80°C
Humidity	≤95% non-condensing	≤95% non-condensing
Connection Ports		



Worldwide Corporate Offices

Headquarter Germany

Hansastrasse 8
D-91126 Schwabach
Tel: +49 9122 79889 0
Fax: +49 9122 79889 21
Mail: info@alpha-outback-energy.com

Eastern Europe

ee@alpha-outback-energy.com

Middle East

me@alpha-outback-energy.com

France and Benelux

fbln@alpha-outback-energy.com

Spain

spain@alpha-outback-energy.com

Russia

russia@alpha-outback-energy.com

Africa

africa@alpha-outback-energy.com

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