

# EmiratesGreen

الامارات الخضراء لتجارته المعدات الكهربائية والميكانيكية  
**EmiratesGreen** Electrical & Mechanical Trading Est.

P.O. Box: 110507 | Phone: +971 2 491 0 757 | Abu Dhabi, U.A.E  
Email: [solar@emiratesgreen.com](mailto:solar@emiratesgreen.com) | Web: [www.emiratesgreen.ae](http://www.emiratesgreen.ae)



**smartharvest**<sup>™</sup>  
by OutBack Power

# MPPT Charge Controller Series

SmartHarvest by OutBack represents a line of renewable energy electronics aimed at meeting the growing global demand for value-orientated, low power-range renewable energy system components.



## Product Highlights—SCCM20-100

- 20A/100V Maximum Power Point Tracking (MPPT) charge controller for off-grid and grid-connected PV systems with energy storage
- MPPT charge controller ensures maximum yield from available solar energy
- Integrated LED display
- Built-in electronic protection circuitry for lightning, panel and battery reversal and short circuits
- Backed by OutBack Power's global sales and support network

SmartHarvest SCCM20-100 Specifications	
Maximum Output Current (I)	20
Nominal Battery Voltages	12 / 24
Input Panel Power (W <sub>p</sub> )	300 / 600
Panel Intelligence	MPPT
Maximum Input Voltage (VOC)	100
Charging Regulation	Four stages: bulk, absorb, float and equalize
Bulk Voltage (VDC)*	Flooded: 14.8 / 29.6 VRLA: 14.6 / 29.2
Absorb Voltage (VDC)*	Flooded: 14.8 / 29.6 VRLA: 14.4 / 28.8
Absorb Time*	2 hours
Float Voltage (VDC)*	Flooded: 13.2 / 26.4 VRLA: 13.5 / 27.0
Equalization Voltage (VDC)* (Flooded Batteries Only)	Flooded: 15.5 / 31.0
Equalization Time*	1 hour
State of Charge Low Voltage Disconnect (V)*	11.4 / 22.8
Low Battery Load Reconnect (VDC)*	12.4 / 24.8
High Battery Load Disconnect (VDC)	15.0 / 30.0
Temperature Compensation*	-5mV/°C
Battery Type Selection	VRLA/Flooded selectable via jumper. Factory default VRLA (jumper inserted)
Data Logging	Internal data logging up to one week, longer data logging available with monitoring software.
Standby Current (mA)	<5
Peak Efficiency	97%
Display	3 LEDs
IP Class	IP20
Operating Temperature Range	-40 to 60°C
Humidity	0-95% RH non-condensing
Dimensions H x W x D (in/cm)	4.3 x 7.8 x 2.2 / 11.0 x 19.7 x 5.7
Weight (lb/kg)	2.16 / 0.98 kg
Certifications	CE, IEC/EN 62109-1
Warranty	Standard 2 year

## Product Description

**The most efficient, high-yield battery charging technology available at a price normally associated with PWM designs.**

In any PV/solar energy system with energy storage, performance is dependent on the batteries, and the batteries in turn entirely depend on the charge controller for charging efficiency and longevity. SmartHarvest makes it possible for a wider range of PV solar electricity systems to take full advantage of premium Maximum Power Point Tracking (MPPT) charging technology with the SCCM20-100, for the price of the usual Pulse Width Modulation (PWM) style products generally found in smaller-scale systems.

The SmartHarvest SCCM20-100 improves system economics in several ways. It is designed for installation and set-up simplicity, reducing labor time in the field. By maximizing solar energy harvesting under a wider variety of environmental conditions, MPPT technology helps the system extract as much electricity as possible for more effective energy storage. It is ideal for use in a wide-range of residential, light commercial, agricultural, community and other applications that can benefit from better yields through more advanced charge controller technology.

\*Default settings. Consult the battery manufacturer for specific charger settings.

[www.smartharvestbyoutback.com](http://www.smartharvestbyoutback.com)



### Worldwide Offices

#### North America

Tel: +1 360.435.6030  
Fax: +1 360.435.6019

#### Latin America

Tel: +55 11.24760150  
Cell: +55 11.988.458688

#### Europe

Tel: +49 9122.79889.0  
Fax: +49 9122.79889.21

#### Asia Pacific

Tel: +852 2736.8663  
Fax: +852 2199.7988

#### Australia

Tel: +61 (2) 8003.3760  
Cell: +61 466 986.155

OutBack reserves the right to make changes to the products and information contained in this document without notice. Copyright © 2015. (04/2015)