SiteFlex® MCU2

SYSTEM CONTROLLER

OVERVIEW

- **Second generation of modular, hot swappable controller for use with SiteFlex® power modules**
- **Hybrid power management function for gensets, VRLA and Lithium-ion batteries, rectifiers and Maximum Power Point Tracking solar modules. Possibility to integrate with DC and AC meters and possibility to monitor and control up to 4 individual tenants.**
- **Manages up to 40 rectifiers**
- **Can read up to 18 analog and 19 digital values including system voltage, load current, battery current and battery temperature**
- **Controller manages energy saving standby function of rectifiers for lower operating costs**
- **Advance solar managment features:**
  - **Peak shaving (up to 4 peak periods/day)**
  - **Load shifting (up to 4 peak and 4 valley periods/day)**
  - **Partial charging (up to 10 discharge cycles/day)**

The SiteFlex® MCU2 controller is designed for SiteFlex® power solutions, used in both indoor and outdoor applications. The MCU2 controller minimises installation time thanks to its easy-to-use web interface for controller monitoring, setup and download of log files.

The SiteFlex MCU2 includes multiple communication ports including one Ethernet connections for local access and also permanent LAN/WAN connectivity and SNMP communication. USB ports provide firmware upgrades and system configuration management and may also be used to quickly backup and restore site configuration settings and data logs. RS485 ports for integration with external devices and Field Supervision Unit via Modbus RTU.

The 160 x 128 TFT color LCD display provides easy access for local users to view the status of operating conditions and any active alarms. Furthermore, the controller is equipped with a three LEDs, which provides status of operating conditions and alarms. With use of 4 functional buttons user can adapt system parameters to individual needs

The SiteFlex MCU2 controller gives access to a 200,000 event alarm history log and a record of 50,000 system readings. In addition, a log of 5,000 historical battery test readings is available.

ELECTRICAL	
Input Voltage	24 to 60 VDC

FEATURES	
Display	Integrated 160x128 TFT color display with selection and navigation buttons
Web UI	All configuration done via web-UI, default IP address 192.168.70.2
Web features	Web functionality includes: real-time data or status, parameter settings, send control commands, pop-up alarms, access system history, upload and download of configuration files etc.
Language support	English, French
Audio	Built-in speaker
LED Indicators	Operation indicator – Green – Normal state: On* Prompt alarm – Yellow – Normal state: Off* Major/Minor alarm – Red – Normal state: Off* *Please consult manual for details

MECHANICAL	
Mounting	Integrated controller for 1U SiteFlex power modules
Dimensions (H x W x D)	42.8 x 85.9 x 252.9 mm
Weight	≤0.8 kg

ENVIRONMENTAL	
Temperature	Operation: -40°C to 70°C LCD working temperature -20°C to 70°C Storage: -40°C to 70°C
Humidity	5% to 90% RH non-condensing
Elevation	0 to 4,000 m
Protection class	IP20

SYSTEM I/O	
Alarm Relays	8 dry contacts
Analog Inputs	18 (System voltage, Load current, Battery current, Battery mid-point voltage, Battery temperature, Ambient temperature, Humidity, Load fuse, Battery fuse, AC voltage, AC frequency)
Digital Inputs	12
Output Power port	12V, 100mA (max)

COMMUNICATION	
SNMP	SNMP v2c/v3 via Ethernet SNMP protocol supports GET, SET and TRAP
TCP/IP	IPv4, IPv6, HTTPS, DHCP, NTP

COMMUNICATION PORTS	
CAN	Internal system communication, 125kbps Self-defined protocol
Ethernet (LAN)	1 x port (front); 10/100 Mbit/s Monitoring and configuration via: HTTPS or SNMP
RS485	1 x port (backplane) for communication with client computer (Baud rate 2400 - 38400, default 9600) 4 x ports (backplane) for communication with BMS and other compatible devices
USB	1 x USB-A (front), for Software Update, inport/export configuration, history export 1 x USB (backsplane) for connection with external devices

STANDARDS AND CERTIFICATION	
Electrical safety	EN 62638-1 Ed.2 IEC/EN 62368-1 Ed.3
EMC	ETSI EN 300 386* Emission: EN 55032, CISPR 32, EN IEC 610000-3-12, EN IEC 61000-3-11 Immunity: EN 55035 IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 *Tested in application
RoHS / WEEE	Compliant
CE Mark (UE)	Yes

Publication no: EMEA-EN-DS-SFX-MCU2-0924

EnerSys World Headquarters
2366 Bernville Road
Reading, PA 19605, USA
Tel: +1-610-208-1991 /
+1-800-538-3627

EnerSys EMEA
EH Europe GmbH
Baarerstrasse 18
6300 Zug
Switzerland

EnerSys APAC
No. 85, Tuas Avenue 1
639518 Singapore
Tel: +65 6558 7333

For more information visit **www.enersys.com**