



### Charge Controller Description:

The MSR1-10 24V NE OVL2A Charge Controller is a stand-alone solar charge regulator designed for use in industrial applications.

The design of the controller is based on well-proven technology and incorporates a 3-stage charging regime. Battery Voltage is sensed at the PCB Battery connection terminals, and an on-board Temperature Sensor allows for temperature compensation.

This controller includes an Over-Voltage Limiter (OVL) function to limit the output voltage to 28V. This OVL is rated at 2A at a maximum input of 30V, and has the ability to handle 3A for 10 seconds every hour. The output of the OVL is connected to two separately-fused Load Outputs. The total combined current from both outputs must not exceed the overall rating of the OVL.

The controller features 1 x Array, 1 x Battery and 2 x Load connections (all 10mm<sup>2</sup> PCB mounted screw terminals).

For on-site changes, the controller can be connected to a handheld Configuration Unit which allows the user to view and adjust all controller regulation and alarm settings.

Four LEDs are provided: Regulation Status, High Volts, Low Volts, Load Cut. One programmable Alarm Relay with volt-free changeover contact and LED is provided.

The unit has Metal Oxide Varistor (MOV) lightning protection on the Array, Battery and Load connections.

The Charge Controller Assembly is housed in DIN rail carrier (215mm x 125mm x 65mm ) for fast assembly inside an enclosure suitable for the environment.

### Basic Features and Options:

- \* PCB Assembly in DIN rail carrier
- \* Common Negative Operation (NE)
- \* 3-Stage Regulation
- \* 0°C to +65°C Operation
- \* Lightning Protection
- \* Solid-State Array Switch rated at 10A
- \* 2A Over-Voltage Limiter for all Loads
- \* 3A Load current for 10 seconds per hour
- \* 1 x Array Input (10mm<sup>2</sup> terminals)
- \* 1 x Battery Input (10mm<sup>2</sup> terminals)
- \* 2 x Load Outputs (10mm<sup>2</sup> terminals)
- \* Automotive fuse on each Input & Output
- \* On-board Temperature Sensing
- \* NiCad or User-Configurable Battery Settings
- \* 4 Status LEDs: Regulation, HV, LV, LVD
- \* 1 x Common Alarm Relay Output
- \* 1 x Auxiliary Volt-Free Input
- \* No remote Battery Voltage Sense
- \* No LCD Display or Keypad
- \* Connector for Configuration Unit:



Manufacturer: The Micha Design Company Limited | Country of Origin: UK | HS/Commodity Code: 90328900

*Specification liable to change.*