



**Main Features**

- Industrial Applications
- 2 x 15A Array Current
- 1 x 15A Load Current
- Solid-state Switching
- Polycarbonate Enclosure
- Low Cost Unit
- Micro-controller Electronics

**Specification**

➤ System Voltages: 12V, 24V, 48V	➤ 10mm <sup>2</sup> PCB Terminals (Alarms: 2.5mm <sup>2</sup> )
➤ System Polarity: Positive or Negative Earth	➤ Induced Lightning Protection
➤ Regulation: Three stage series regulation	➤ IP65 Polycarbonate Enclosure (250 x 175 x 100mm)
➤ High Volts, Low Volts, Load Cut, & Aux Alarm	➤ Grey or Transparent Enclosure Lid
➤ Battery Protection: Load Disconnect / Reconnect	➤ PG21 Glands for Battery, Array and Load cables (13-18mm cable diameter)
➤ Temperature Compensation (External sensor)	➤ PG11 Gland for Battery Sense and Alarm cable (5-10mm cable diameter)
➤ Regulation, Switch, and Alarm Status LEDs	➤ Ambient Temperature range -10°C to +55°C
➤ Disable Link (disconnects arrays and load)	
➤ 40A Battery Fuse, 20A Load Fuse	

**Set-points**

Charge Controller Set-points	Unit	Fulmen	Vented	VRLA
Boost & Equalisation Regulation Voltage	(per cell)	2.45 V	2.40 V	2.30 V
Float Regulation Voltage	(per cell)	2.30 V	2.35 V	2.25 V
High Volts Alarm	(per cell)	2.50 V	2.45 V	2.40 V
Low Volts Alarm	(per cell)	1.95 V	1.90 V	1.90 V
Load Cut Alarm and Disconnect	(per cell)	1.90 V	1.80 V	1.80 V
Temperature Compensation Null Temp	°C	20°C	25°C	25°C
Temperature Compensation Rate	(per cell)	-5.0mV/°C	-5.5mV/°C	-3.3mV/°C

**Ordering**

Product	System Voltage	System Polarity	Enclosure Lid	Battery Type
MSR2-30	12V	PE (Positive Earth / Positive Common)	(G) – Grey Lid	Fulmen Cells
	24V	NE (Negative Earth / Negative Common)	(T) – Transparent Lid	Vented Cells
	48V			VRLA Cells

**Example: MSR2-30 12V PE (G) Fulmen Cells**