


IMARK

PRODUCT DESCRIPTION

	IMARK SR SOLAR REGULATORS
	Full Feature RAPS Solar Regulators Imark Stock # 80483x
	Features: <ul style="list-style-type: none"> ▪ PWM with shunt regulation ▪ Low loss MOSFET's ($\approx 98\%$ efficiency) ▪ Rugged mechanical design ▪ Inbuilt Input PV Surge Protection ▪ Battery Over Voltage Protection ▪ Regulator Over Temperature Protection ▪ High Power Operation (16kW-240Vdc, 12kW-120Vdc, or 5kW-48Vdc) ▪ Fully rated for 100 Amps on all terminals ▪ Efficient chamber cooling system ▪ Illuminated Panel Meters for Battery Voltage & Temperature, & Charge Current ▪ Float, Charge, Boost, & Surge LED Indicators ▪ Compact 4RU Rack or Wall Mounting ▪ Link Selection for Flooded or Gel batteries ▪ Built-In RFI Suppression ▪ 100 Amp Shunt for external monitoring ▪ Battery Temp Compensation & Sensor included

PRODUCT DESCRIPTION:

The IMARK SR range of solar regulators utilise high power low Rdss MOSFET's for switching. The SR Range are shunt regulators that only regulate when the battery is fully charged, thus providing maximum efficiency while minimising heat generation. The IMARK SR range solar regulators are housed in a metal 4RU size cabinet and can be either wall or rack mounted. The mechanical construction provides fan forced air to the heatsink cooling chamber and activates at 60°C. A 12way interface connector on the rear panel enables easy interfacing to external devices or popular inverters. Large capacity Metal Oxide Varistors are fitted internally for lightning protection on PV inputs. 100 Amp binding posts for battery, PV, & Earth connections are fitted on the rear panel. LED's are used to indicate the battery charging mode, & the Surge Protection condition. Illuminated panel meters show Battery Voltage, Battery Charge Current, & Battery Temperature. Easy to read meters provide non-technical people with easily understood information that can be very helpful for remote diagnosis of system performance.

SPECIFICATIONS			
MODEL	SR48V5K	SR120V12K	SR240V16K
IMARK Stock #	804834	804832	804833
Input Voltage (nominal)	48 Vdc	120 Vdc	240 Vdc
Input Voltage (Maximum)	150 Vdc	250 Vdc	400 Vdc
Input Current (maximum)	100 Amps	100 Amps	70 Amps
Regulation Method	Shunt, Pulse Width Modulation		
Efficiency	Greater than 98% when battery charging		
Charge Setpoints	Float, Charge, & Boost		
Charge Setpoint Adjustment	Set by Rotary Switch on PCB, calibrated in cell voltage		
Battery Conditioning	Batteries held at Charge voltage for 2 hours each day, followed by Float Charging		
Voltage Setpoint Range	2.225V to 2.600V per cell		
Temperature Compensation	None, or Optional External Sensor, set by link, 6mV/°C/cell		
Over Temperature Protection	Over Temperature sensor trips circuit breaker on high (90°C) heatsink temperature		
Over Voltage Protection	Independent Battery Over Voltage circuit trips circuit breaker after 2 minute delay		
Unit Size & Weight	250(L) x 483(W) x 176(H) mm	13.6 Kilograms	
Shipping Size & Weight	575(L) x 540(W) x 305(H) mm	16 Kilograms	
Design & Construction	Australian designed and manufactured		