

# Internet Connectivity without any fuss using Imark Site Explorer

The Imark Site Explorer easily enables changes to installation settings, or just the ability to monitor your system performance using your standard web browser. Only one SRX regulator with the LCD Display needs to be installed to monitor and interrogate up to eight regulators when connected correctly. Any SR and SRX model in a system can be interrogated from one LCD display, or by direct connection to the LCD using a PC or laptop computer. With Internet access on site, Imark Site Explorer lets you do the lot (monitor, download data, or change settings) from your desk, smart phone or tablet, anywhere in the world.

Everything works the same either directly connected or using the Internet!

## IMARK SITE EXPLORER



Monitor your system operation from anywhere using the Internet, or directly using a laptop, or PC. Regulator performance is updated at 15 second intervals thus providing up to date performance data. Data can be down-loaded on a daily, weekly, monthly, annual, or lifetime basis directly into MS Excel for easy graphical monitoring



The Imark Site Explorer enables setting changes (password protected) to be done instantly. The Settings screen displays the settings for up to eight regulators in columns enabling easy settings comparisons or changes.

Alarm Messages, if present, can be viewed and acted upon immediately

Mimic Screen enables you to see and assist with field changes as they happen without leaving your desk

## Solar Regulator Specifications

MODELS	SR20	SR40	SR60	SRX20	SRX40	SRX60
I MARK Stock #	804861	804862	804863	804865	804866	804867
Battery Voltage (nominal)	12Vdc, 24Vdc, or 48Vdc Automatically selected by regulator or Manually set					
PV Input Voltage (Maximum)	140 Voc					
Renewable Input Power	20 Amps	40 Amps	60 Amps	20 Amps	40 Amps	60 Amps
Input Power (maximum)	1.0kW	2.0kW	3.0kW	1.0kW	2.0kW	3.0kW
Maximum Load Current	20 Amps	40 Amps	60 Amps	20 Amps	40 Amps	60 Amps
Standby Power Draw	50mW, 60mW, 70mW, or 80 mW (depending on Regulator On or Off, & LCD On or Off)					
Communication Ports	CANBus, Ethernet, USB, SD Card					
Renewable Input	Up to Rated Current					
Regulation Method	Multi-Phase Pulse Width Modulation with Maximum Power Point Tracking (MPPT)					
Efficiency	Greater than 95% when battery charging					
Charge Setpoints	Bulk, Absorption, Equalise, and Float					
Charge Setpoint Adjustment	Set by DIP Switches on PCB			Set from LCD during programming		
Battery Conditioning	Absorption voltage (daily for set time), and/or Equalise (for set time & cycle), followed by Float Charging					
Voltage Setpoint Range	2.225V to 2.600V per cell					
Temperature Compensation	None, or External Sensor, set by link, 1 - 10mV/°C/cell					
Voltage Protection	Maximum PV Input Voltage 140Vdc					
Over Temperature Protection	Over Temperature sensor reduces the output power from 70°C to zero at 90°C heatsink temperature					
Over Voltage Protection	Independent Battery Over Voltage Protection circuit					
Programmable Conditions (Days, Time, Temperature, & Battery SOC)	Load Output Load Release ONLY			Load Output Load Release, Load Output Load Timer, Remote Out Signal Terminal		
Unit Size mm excluding Protrusions	175 (H) x 160 (W) x 110 (D) mm	235 (H) x 160 (W) x 110 (D) mm	235 (H) x 160 (W) x 140 (D) mm	175 (H) x 160 (W) x 110 (D) mm	235 (H) x 160 (W) x 110 (D) mm	235 (H) x 160 (W) x 140 (D) mm
Unit Weight Kgs	2.45 Kgs	3.25 Kgs	5.4 Kgs	2.5 Kgs	3.3 Kgs	5.45 Kgs
Shipping Size	240 x 180 x 130mm	300 x 180 x 130mm	300 x 180 x 150 mm	240 x 180 x 130mm	300 x 180 x 130mm	300 x 180 x 150 mm
Shipping Weight Kgs	3.0 Kgs	4.0 Kgs	6.0 Kgs	3.0 Kgs	4.0 Kgs	6.0 Kgs
Operational Display Method	6 x LED's			4x20 Alphanumeric Back-lit STN LCD, and 6 LED's		
Warning Annunciation	LED colours			Buzzer, LCD, & LED colours		
Inclusions	Regulator, Manual (on CD), Battery Temperature Sensor, & Mounting Screws					
Design & Construction	Australian designed and manufactured					
Standards	AS/NZS CISPR11:2004					

### OPTIONS

SD Card	Not Available	1GB or 2 GB
Redundancy C/O Module	Works with any model combination	

### 3RU Rack Mounted Unit Specifications

I mark Stock #						804869
Nominal Cabinet Size	19" 3RU Nominal					
Weight	483mm (W) x 132mm (H) x 290mm (D) or 19" (W) x 53/16" (H) x 11 1/2" (D) (excluding protrusions)					
Shipping Size & Weight	Up to 12 KG (26 1/2 Lbs) depending on how many & which regulators are employed.					
Others	575(L) x 540(W) x 180(H) mm up to 14.0 Kilograms					
	Other Specifications are as described above					

### Remote LCD Unit Specifications

I mark Stock #	804870
Size	160mm (W) x 130mm (H) x 55mm (D) or 19" (W) x 53/16" (H) x 2 1/4" (D) (excluding protrusions)
Weight	1.3 Kgs (2.9 Lbs)
Shipping Dimensions	180 x 170 x 80 mm 1.4 Kgs



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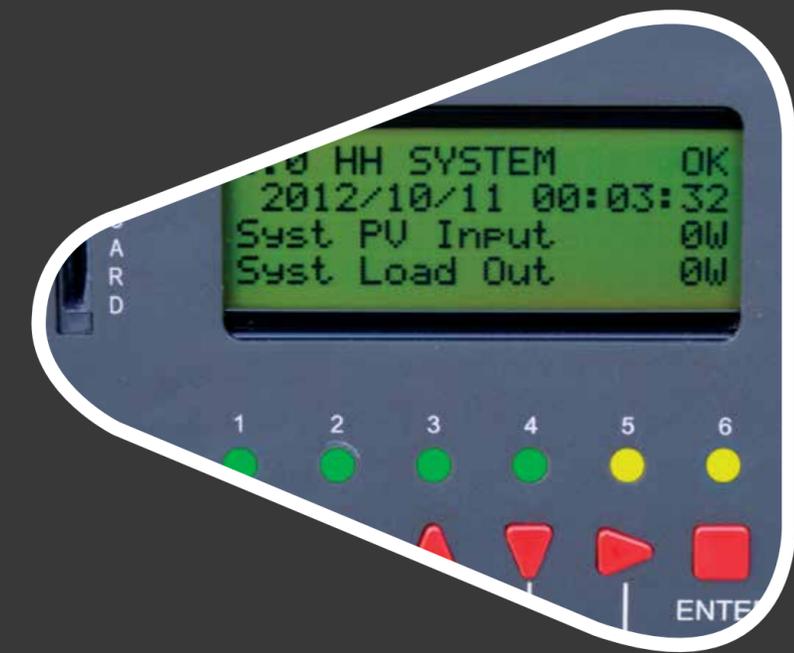
Available from:

Unit 2/75 Mark Street, North Melbourne, Vic. 3051. Australia



I mark is a wholly Australian owned company and we are proud to design and manufacture our own products in Australia. This gives us the flexibility to customise our products to suit the individual needs of the end user. Accordingly, we back our products with great technical support and a wide range of spare parts.

ABN: 33 007 064 280



# MPPT Solar Regulators

FOR YOUR OFF-GRID INSTALLATION

The complete family of solar regulators perfect for any stand-alone remote solar system at 12, 24, or 48Vdc and with current requirements of 20, 40, & 60 Amps.

Efficient, Feature Rich Regulators For Harsh Environment Remote Area Systems



## Everything you need without the fuss

- ▶ The IMARK SR series entry-level models form part of the complete range of Rugged Reliable Solar Regulators
- ▶ Simplicity while maintaining all the performance features needed to efficiently manage your solar system
- ▶ The same heavy duty heatsink, and power components as the full featured IMARK SRX models, ensures maximum solar performance and equipment reliability.



### SR Series Features:

- MPPT maximises the solar energy harvest especially when the battery SOC is low, or if using solar panels with less than ideal voltages
- Multi-phase PWM reduces noise interference
- Large Heatsink & rugged construction ensure cool running and promote reliability and longevity
- Easy mounting arrangement
- Plug & Socket connectors make installation a breeze
- 20 Amp, 40 Amp, & 60 Amp models
- Automatic Battery Voltage selection from 12, 24, & 48 Volts dc nominal
- High Efficiency – better than 95%
- CANBus communications allows system expansion up to 8 units to form a larger integrated system with any 20, 40, or 60 Amp combination on an as required basis
- Load Output can be managed with conditions, when programmed from a SRX Series LCD model
- Battery Temperature Sensor included
- Ambient Temperature Sensor optional
- Extensive protection features
- Remote Internet access available for up to 8 units when installed with one Internal LCD or a Remote LCD Unit
- LED's provide simple status and diagnostics information at a glance
- DIP switches permit easy on-site programming
- All external connections in one convenient location
- All connections are made with Plugs & Sockets and can be pre-wired enabling easy fast trouble free installation in those tight locations
- All connectors are unique to prevent miss-connection and/or damage
- A Digital Output for control of fans, lights, airconditioning, pumps, generator, or other equipment managed by conditions when programmed from a SRX Series LCD model.



## All the bells and whistles

The SRX series "Top of the Range" versions are packed with useful features and can be programmed to satisfy almost any customer requirement. They are complete with the Imark Site Explorer enabling Internet access capability for performance monitoring and providing easy setting change ability.

### SRX Series Features:

- The SRX Series include all the features of the SR models, less the DIP Switches, but with the LCD Display, and much more
- CANBus communications allows system expansion up to 8 units to form a larger integrated system with any 20, 40, or 60 Amp combination on a needs basis
- Load Output can be managed with conditions, such as Time, Battery SOC, or Temperature to control Lights, Pumps, or other equipment
- Easy Set-point Adjustments using the Keys and LCD Display
- SR & SRX series can be "mixed & matched" to increase system size
- One SRX regulator can interact with 7 SR Series Regulators in the system to reduce system costs.
- Digital Output Terminal to control external devices which can be managed by Battery SOC, Time of Day, and/or Temperature conditions
- Shutdown Alarm output terminal for telemetry applications



## Options to satisfy any installation requirements



- All external connections in one convenient location
- All connections made using plugs & sockets making installations and/or change-outs easy
- Ethernet port for use at sites with Internet capability and can be used with an external wireless Modem for remote interrogation, for data downloading, or for making setting changes
- CANBus connections for the Remote LCD Display and for connection to multiple SR or SRX Regulators.

- 3RU Rack Mounting configurations are available using any model combination
- Rack mounting models include the same features as the wall mounting models, and can be installed as a system with up to 8 regulators
- Cooling fans included to enhance cooling when installed in congested rack installations
- Can be configured for redundancy using an Imark Change-Over Relay Module.

- Optional Remote Control Unit connects directly to regulators via CANBus
- Can be up to 100 Metres from SR/SRX Regulators
- External power supply is NOT required for remote extensions up to 100 metres
- Includes all features and functions described for the internal LCD display
- Ideal for monitoring system performance from the office or home
- SD Card & USB Ports
- Ethernet port for access from anywhere using your web browser and the Internet
- Distances of up to 1 Km can be achieved by special order using RS485 communications.

