

APEX

Solar Geyser System (SGS) Datasheet

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Datasheet



## TECHNICAL SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS:

Description	Specification
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#### AC INPUT

Voltage	230V AC
Frequency	50 Hz
Current	15A
Connection	3 x 4mm <sup>2</sup> Screw Terminals
Installation Pre-requisites	AC MCB and local Isolation point (not supplied)
AC Detection	Yes

#### AC MODE OUTPUT

Voltage	230V AC
Frequency	50 Hz
Current	15A

#### SOLAR INPUT

Input Voltage Range	125V - 230V DC (Absolute maximums)
Maximum Input Current	15A
Maximum Solar Power Conversion	1500W
MPPT Range	168 - 230V DC
Connection	MC4 Solar Connectors
Installation Pre-requisites	External AC and PV Isolators
Maximum Solar Array Size	2.5kWp (Note voltage and current limits)

#### SOLAR MODE OUTPUT

Voltage	40-230 <sup>Vrms</sup> Modulated DC
Max Current	15A

#### GEYSER ELEMENT

Max Voltage	230V
Power	2000W - 3000W
Element Resistance	17Ω - 27Ω
Connection at Device	3 x 4mm <sup>2</sup> Screw Terminals
Connection at Element	2 + Earth

#### TEMPERATURE SENSOR

Measurement Range	10°C to 85°C
Accuracy	+/-2°C
Type	Analog (K-Type)
Cable Length	10m
Connector	Push Terminal (PCB Mounted)

## COMMUNICATIONS

Wi-Fi	802.11 b/g/n
Remote Updates (Firmware Over the Air)	Ability to update firmware remotely

## MECHANICAL SPECIFICATIONS

Dimensions (Length X Breadth X Depth)	210mm x 225mm x 84mm
Cooling	Natural Convection
Cable Strain Relief	Integrated for AC cables and thermal probe
Ingress Protection	IP2X
Terminal Access	Removable cover

## INSTALLATION SPECIFICATIONS

Mounting	Vertical only
Environment	Indoor Use only. Not for in-roof installation.
Fasteners	Wall plugs with pozi screws

## CERTIFICATION AND COMPLIANCE

RF	EN 300-328, Designed to IEC 60730
EMC	EN 301489-1, Designed to IEC 60730
ICASA	RF approved
NRCS	RCC 2112093
Safety	IEC 60950-1 Electrical Safety
	IEC 60730-1 Automated electrical controls

## ENVIRONMENTAL CONDITIONS

Maximum Ambient Temperature	0°C to +30°C full output, limited output up to +50°C
Relative Humidity	0% - 80%
Operating Altitude	0....2000m

## DEVICE SAFETY FEATURES

Device Over-Temperature Shutdown	75°C
Over Current Protection	Fuse (1 x AC and 1 x DC)
Solar Reverse Polarity Protection	No
Grid feedback Safety	Relay based power path management

## USER SAFETY FEATURES

Earth Leakage Detection	Residual Current Detection
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## USER INTERFACE

On Device	RGB Digital LED x 4 + local access point
Remote	Web browser
Settable Temperature Range	+30°C to +70°C (Software)

## ORDERING INFORMATION

Part Number	Description
FG-ED-OO	Apex Solar Geyser System controller. Excludes probe.
FG-TP-AA	Apex SGS Temperature probe, 10m
FG-TP-AB	Apex SGS Temperature probe, 15m
FG-TP-AC	Apex SGS Temperature probe, 20m
FG-TP-AD	Apex SGS Temperature probe, 30m

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## WARRANTY

The Apex SGS is warranted to be free from defects for a period of 1 year from purchase, subject to Apex's Warranty terms and conditions, a copy of which is available at: [www.ApexSolar.Tech](http://www.ApexSolar.Tech)

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## SUPPORT

You can contact our support centre for technical assistance with this product or the associated services.

## PRODUCT SUPPORT

When contacting Product Support via telephone or email please provide the following information for the fastest possible service:

- Type of Inverter
- Serial number
- Battery type
- Battery bank capacity
- Battery bank voltage
- Communications type used
- A description of the event or problem
- Edge device serial number (available on product label on the under side of the Edge Device)

## CONTACT DETAILS

Telephone: +27 (0) 80 782 4266  
Online: <https://www.rubiconsa.com/pages/support>  
Email: [support@rubiconsa.com](mailto:support@rubiconsa.com)  
Address: Rubicon SA  
1B Hansen Close,  
Richmond Park,  
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South Africa

You can reach technical support by telephone directly Monday to Friday between 08h00 and 17h00 (GMT +2 hours). Queries outside of these hours should be directed to [support@rubiconsa.com](mailto:support@rubiconsa.com) and will be answered at the earliest opportunity. When contacting technical support, please ensure that you have the above listed information available.

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