

# APEX

SOLAR GEYSER SYSTEM (SGS)



## TECHNICAL SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS:

	Description	Specification
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	110 - 230VDC
	Maximum Input Current	15A
	Maximum Power Input	1500W
	MPPT Range	125 - 230VDC
	Connection	MC4 Solar Connectors
	Installation Pre-requisites	External AC and PV Isolators

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

	Description	Specification
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

	Description	Specification
<b>Mechanical specifications:</b>	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

<b>Installation specifications:</b>	Mounting	Vertical only
	Environment	Indoor Use only. Not for in-roof installation.
	Fasteners	Wall plugs with pozi screws

<b>Certification and compliance:</b>	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

<b>Environmental Conditions:</b>	Maximum Ambient Temperature	0°C to +30°C full output, limited output up to +50°C
	Relative Humidity	0 % - 80%
	Operating Altitude	0....2000m

<b>Device safety features:</b>	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

<b>User safety features:</b>	Earth Leakage detection	Residual Current Detection
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<b>User Interface:</b>	On Device	RGB Digital LED x 4 + local access point
	Remote	Web browser
	Settable Temperature Range	+30°C to +70°C (Software)