

EASIWise **Delta Max** is a connected smart geyser control system that uses dedicated **PV Panels** to heat a geyser directly, reducing grid electricity reliance during usable solar periods. **Delta Max** is useful for homes that already have solar systems, allowing the geyser to be **powered from its own dedicated PV supply** instead of draining the home's main inverter and battery system.

Electrical specifications

AC specifications

Description	Specification
Operating voltage	100–230 VAC / 50 Hz
Main geyser relay contact rating	230 VAC / 30 A
Geyser element current measurement	0–20 A ($\pm 10\%$)
Rated geyser element output	Up to 4kW MAX

Solar and DC specifications

Description	Specification
PV panel input / DC solar input range	80–240 VDC
Recommended PV array	Minimum 120Vmp, maximum 200Vmp
Solar optimisation logic	0–20 A ($\pm 10\%$)
Typical PV panel configuration	2 x HV panels with Vmpp between 55V and 75V, or 3 x LV panels with Vmpp between 35V and 50V
Solar control method	MOSFET-driven PWM

Measurement specifications

Geyser element energy estimation	Based on current measurement and 230 VAC nominal mains voltage
Geyser switching temperature differential	1°C

Temperature and control specifications

Description	Specification
Default geyser temperature setting	55°C
Geyser control temperature range	30°C to 65°C
Recommended practical setpoint	60°C to 65°C
Tank over-temperature fault threshold	>85°C

Probe specifications

Description	Specification
Primary geyser thermistor display range	0–99°C
Primary geyser thermistor operating range	-20°C to 130°C
Temperature tolerance	±2%

Timer and operating behaviour

Description	Specification
Default geyser setpoint	55°C
Programmable schedules	2x Programmable daily timer periods
Holiday mode	Disables mains heating / geyser element operation
Boost mode	Manual override heating function for 1 hour or until desired temperature is reached

Operating notes

- In the event of a geyser temperature sensor failure, the system reverts to thermostat-controlled operation.
- AC takes preference when timer periods overlap with solar heating periods.

Safety and protection features

Description	Specification
Element fault detection	Yes
Earth leakage fault indication	Yes
Water leak detection	Yes, with optional drip tray pad
Over-temperature protection / indication	Yes
Temperature probe fault indication	Yes
Solar pump fault indication	Yes
Electric shock protection compliance evidence	Yes

Water leak response

- Water leak condition is indicated by alarm / symbol / notification depending on interface used

Known installation constraints

- Indoor dry-area installation only
- Unit should be installed above any pipes which may leak into or onto the enclosure
- For outdoor installation, unit must be placed inside an IP65 waterproof housing
- Unit should be mounted away from moisture and electromagnetic fields

Compliance and certification

Description	Specification
Test report number	WCT 21/1255
Product description	Hybrid Geyser Controller
Test specification	IEC 60669-1:2017 / SANS 60669-1:2017 IEC 60669-2-2:2006 / SANS 60669-2-2:2007

