

Introducing the Geysersafe E-node™

The **Geysersafe E-node™** (Patent pending 2020/04005) is scientifically proven to *protect and extend* the life of a fixed electric water storage heaters (Geysers) by up to 30 years (SANS 0155) using a specially designed electronic anode that uses a tiny amount of impressed current to balance the inherent chemical reaction that arises when water and steel come into contact.

Conventional sacrificial anodes work by introducing a chemically active metal (usually Zinc / Magnesium) into the geyser that corrodes 'sacrifices itself' in place of the steel of the tank. The challenge is that the sacrificial material of the anode gets used up in the process resulting in the geyser itself beginning to corrode after a relatively short period. Accordingly, to be effective, sacrificial anodes need to be replaced approximately every 18 months, whereas the **Geysersafe E-node™** is designed to last for >20 years.

The **Geysersafe E-node™** utilizes a process initially described by Michael Faraday and which is widely used across many industries in the prevention of corrosion. Recent developments in semi-conductor technology has enabled this process to be adapted for use in much smaller applications such as domestic geysers.

The advanced technology used by the **Geysersafe E-node™** provides the following additional capabilities turning any geyser into a Smart Geyser:

- Wi-fi, Bluetooth and Sigfox connectivity
- Ability to remotely view and control various parameters such geyser temperature, timers, electricity usage, GPS location etc. through the **Geysersafe E-node™** app.
- Monitoring the internal condition of the geyser over time, as well as the prediction of a geyser failure before it occurs.
- Detecting excessive water in the drip tray and outlet overflow pipe.
- Isolate the geyser electrically and physically shut off the water supply* limiting damage when a failure is detected. (*requires additional solenoid shut-off valve sold separately).

*Fits all popular geysers
produced in SA*

Geysersafe E-node™



Certification

The **GeyserSafe E-node™** is designed and manufactured to the highest safety and quality standards and has been independently tested and certified by:

3rd Party Cathodic Protection verification -Corrosion Lab, UJ precinct JHB

ISERT Laboratories, according to the following European Standards:

Safety – EN 62368-1 Part 1

EMC – EN301 489-1:V2.2.3 & EN301 489-3:V2.1.1

Radio Frequencies- EN 62311:2008

Sigfox – ETSI EN 300 220-1 V3.1.1(2017-02) & ETSI EN 300 220-2 V3.1.1(2017-02)

GeyserSafe E-node™

Fits all geysers produced in South Africa...Proudly South African!

The **GeyserSafe Enode™** consumes less power than typical cell phone charger other device and can be supplied from the geyser itself or small solar panel. It comes equipped with an internal 20 year life Lion battery to ensure power failures and inclement weather do not adversely affect the system operation.

System Specifications :

Anode Material: Titanium MMO coated

Input voltage: 96-230VAC

Battery: Lithium-ion 3000mAh

Bluetooth: BT4.2

Wi-fi: 2.4g supports 802.11b/g/n

GPS: GPS & GLONAS L1,1575,42MHz – 143dBm

Sigfox: 2RC1

Temperature Monitoring: -50 to +240 C'

NFC: 13.56MHz 40mm 106Kbps

Warranty [TBC]

For the life of the geyser, minimum 10 years