

DATASHEET

Remote generator monitoring and control

Live readings, alarms on your phone and remote start and stop for standby generators with DSE controllers, through a 4G gateway built for sites where the mobile network is not always reliable.

HOW IT WORKS

STEP 1**Your DSE controller**

The generator's existing controller, for example a DSE7320 MKII. Its engine protection is unchanged.

**STEP 2****GenWise Gateway**

Industrial 4G gateway wired to the controller over RS485. Reads it every few seconds and carries out commands.

**STEP 3****GenWise**

The whole fleet on one website and on your phone: status, alarms, history and remote control.

KEY FEATURES

Live readings

Engine speed, oil pressure, temperatures, fuel, battery, load, voltages and currents, every few seconds.

Remote control

Start, Stop, Auto and Manual from web or phone, with typed confirmation and an audit log of every command.

Built for patchy networks

Two SIM cards, automatic connection recovery, remote reset by SMS, and readings stored on site during an outage.

Alarms on your phone

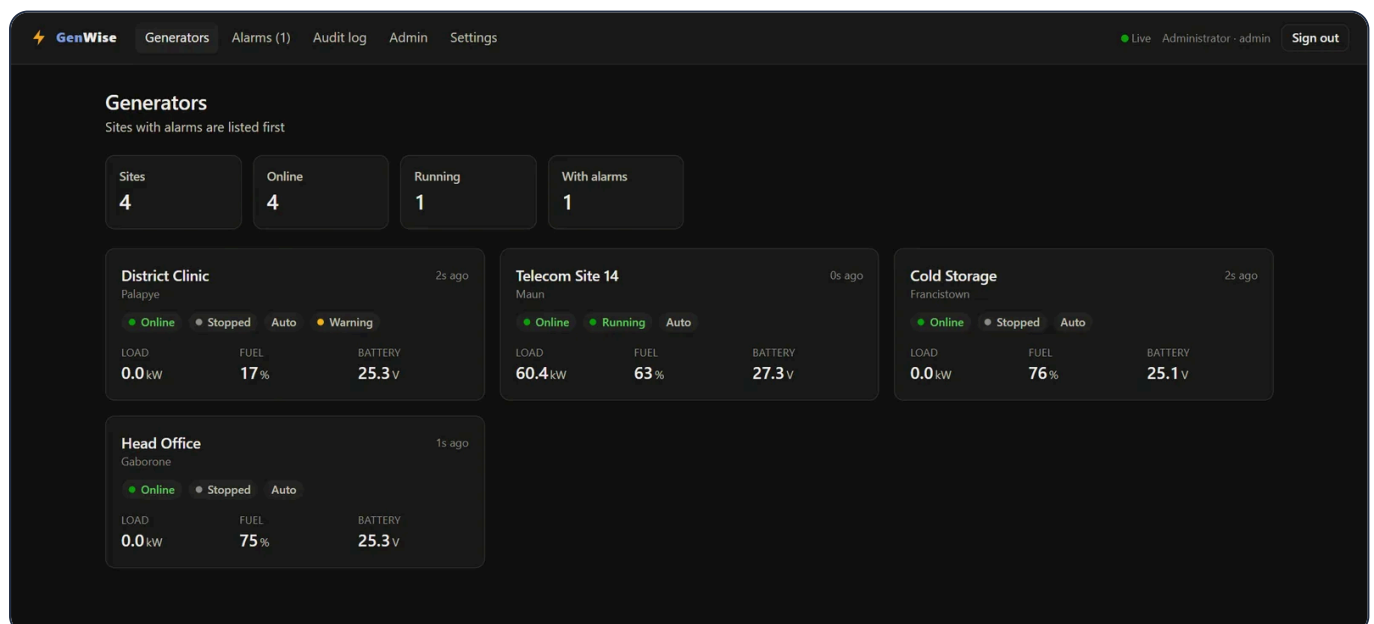
Shutdowns, warnings and lost communication by phone notification and email, with full alarm history.

History and trends

Charts from the last hour to 30 days; run hours, starts and kWh totals.

Secure by design

Encrypted end to end, a separate login per gateway, and viewer, operator and administrator roles.



GenWise fleet overview (demonstration data).

GENWISE GATEWAY

Mobile network	4G LTE Cat 4, with 3G and 2G fallback
SIM	2 × Mini SIM, automatic switching (weak signal, no network, data failure, data limit); eSIM on some versions
Connection recovery	Ping and web checks with automatic restart; reset by SMS
Controller interface	RS485 (Modbus RTU); RS232 also available
Ethernet	1 × RJ45, 10/100 Mbps
Inputs / outputs	3 configurable digital inputs/outputs, 1 analog input (0–30 V)
Location	GNSS (GPS, GLONASS, Galileo, BeiDou)
Antennas	SMA connectors for mobile and GNSS
Power supply	9–30 V DC, reverse polarity and surge protection
Power consumption	Idle under 1.5 W, maximum under 3.5 W
Housing	Anodised aluminium, IP30
Dimensions / weight	83 × 25 × 74.2 mm; 165 g
Mounting	DIN rail or wall
Operating temperature	–40 °C to 75 °C, 10–90% humidity non-condensing

GENWISE PLATFORM

Controllers	DSE controllers; built and tested for the DSE7320 MKII
Gateways	GenWise Gateway; DSE890 MKII (via MQTT, alongside DSEWebNet)
Update rate	Every 5–10 s; history every minute, kept 400 days
Engine data	Speed, oil pressure, coolant and oil temperature, fuel level, battery and charge-alternator voltage
Generator data	kW, kVA, load %, power factor, frequency, phase voltages and currents
Mains data	Phase voltages, frequency
Totals	Run hours, number of starts, kWh
Alarms	Shutdown, electrical trip, warning, loss of communication; acknowledgement and history
Remote control	Start, Stop, Auto, Manual, Reset alarms, Mute
Notifications	Phone push notifications and email
Access	Any web browser; Android app coming soon
Security	HTTPS and MQTT over TLS; hashed passwords; per-gateway logins; audit log
Mobile data use	About 50–150 MB per site per month

MOVING FROM THE DSE890

A DSE890 MKII can connect to GenWise as it is, alongside DSEWebNet. The original DSE890 cannot connect to GenWise and is replaced by a GenWise Gateway on the same controller. Sites can move one at a time, and we recommend starting with a pilot at the site that gives the most trouble.

ENQUIRIES AND DEMONSTRATIONS

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