

AIRlert LIVE Fact Sheet

7 August 2026 · airlert.co.uk · Frequency Precision Ltd · for Telecare coordinators, ARC partners & commissioning teams

Every figure measured on the date above against the running system and its codebase.

The platform in numbers

Lines of our own code	338,700
Main languages	PHP 58% · JS 27%
Native Android app (LIVE board)	Kotlin
Outbound alert channels	13
Inbound routes (incl. our Open API)	12
ARC platforms programmed / protocols	10 / 3
ARC in live sandbox testing — passing	Monitor Sentinel

Connected in every direction

- **Out:** SMS, voice, WhatsApp, email, Telegram, Discord, Matrix, Android & web push, ARC alarm protocols (SCAIP · SIA DC-09 · BS 8521-2 NOW-IP), Open API, webhooks, nurse-call LED boards.
- **In:** AIRlert hub sensors, nurse-call Open API, LIVE board app API, two-way SMS / WhatsApp / Telegram replies, ARC reverse callbacks — plus a ready-built **Home Assistant VHUB** connection opening the door to ZigBee and the wider smart-sensor world.

The server it runs on

- **Google Cloud, London** (europe-west2) — UK data residency; hardened, shielded servers.
- **Self-healing:** health-checked every 10 seconds; a failed server is rebuilt automatically — no engineer call-out.
- **Scales on demand:** grows from 1 to 3 servers automatically under load; bigger servers, more servers and database upgrades are each a single configuration change.
- **Fixed IP addresses both ways** (ideal for ARC firewall allow-listing); HTTPS certificates auto-renewed; zero-downtime releases with instant rollback.

Security — Cyber Essentials

- Frequency Precision holds **Cyber Essentials** (organisation level); the portal is operated to the same five control themes as it evolves.
- Login lockout (5 fails / 15 min) · authenticator MFA for admins · no public SSH anywhere · database private & encrypted-only · no plaintext secrets (Google Secret Manager).

Backed up on three separate layers

- **Weekly** build & settings backups (full code history on GitHub; versioned releases).
- **Separate weekly encrypted capsule** of user data, logs, tokens and secrets — encrypted so even the server itself cannot read it; stored offsite.
- **Daily** platform backups: database (14 kept, 7-day point-in-time recovery) and disk snapshots.

Proven fallback — two servers

- We have already run the site **synced across two servers and switched over once** — live traffic mirrored in real time, then a clean cutover to the current Google Cloud platform.
- The plan: a standing second synced server, ready to switch to at any time. Automatic server replacement already covers day-to-day failure.

AI on the platform — live today

- Incoming events are summarised into **overnight and weekly reports** — bedtime, sleep patterns, morning rise, weekly averages — on the AI message board and graph.
- Carers rate every summary (thumbs up / down); **AI engines learn from that feedback**.
- AI coding agents (Cursor / Claude), under our direction and full GitHub review, keep extending the platform toward individual solutions per user.

Open by design — never a walled garden

- **Entry-level access is free.** The portal exists to make our sensors more capable — not to become a subscription product.
- Open to alternative sensors coming in and other platforms going out, as part of a community response; selected components are planned to go **open source**.
- True to our **POCSAG pager roots**: hubs still support pager traffic today, and a hybrid peer-to-peer design (concept under exploration) would keep alerting alive even with no internet.

Room to grow

- Growth is a **configuration change, not a redesign**: a growing fleet of users and HUBs is absorbed automatically, and ten times the capacity is a settings change applied with zero downtime.
- Growth in hubs, users, traffic and storage is charted daily with a one-year projection — capacity decisions are made from data, months ahead of need.