

PowerView™

Unified monitoring, control, and integration for
AGILE-CORE® distributed edge power systems

AGILE-CORE®
Distributed Edge Architecture

2 Second live telemetry polling interval

9 proactive alert types - overcurrent, fault, offline & more

\$0 added cost - included with every
HEADEND

FEATURES

- Runs on the Sinclair® Digital Server
- Browser-based
- No install required on client
- 100% on-premises · No cloud · No subscription
- Included standard with every AGILE-CORE® HEADEND

THREE PURPOSE BUILT VIEWS

Dashboard View

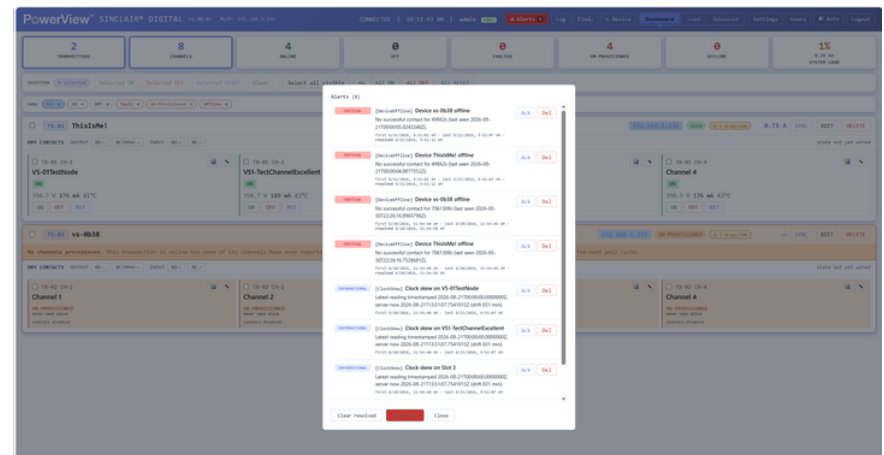
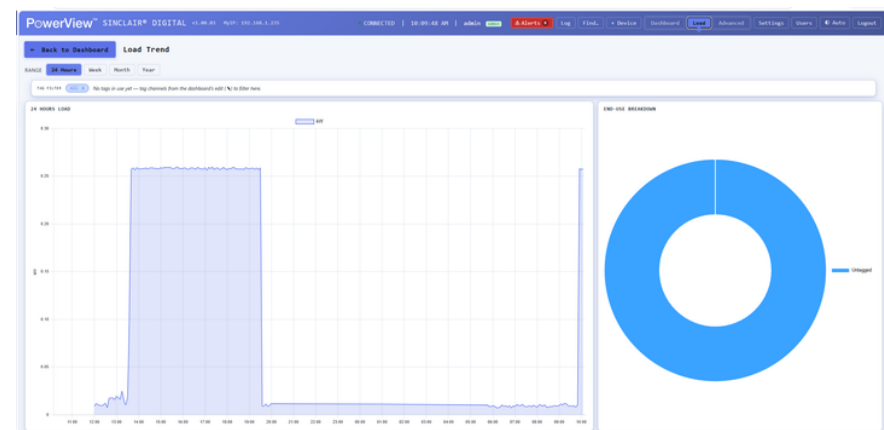
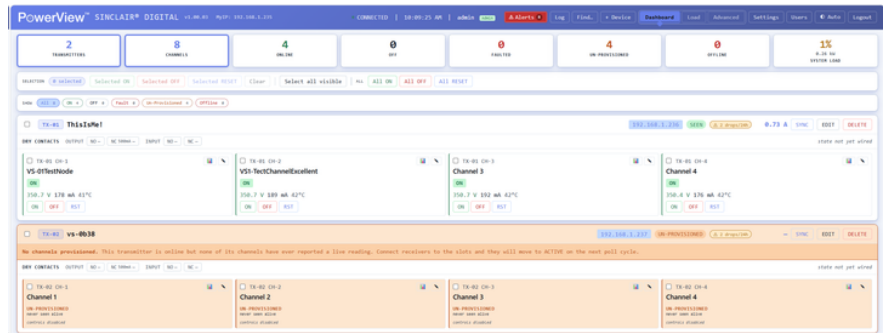
- 8 KPI tiles: transmitters, channels, online, off, faulted, un-provisioned, offline, system load %
- Color-coded channel cards with live V / A / °C readings
- SHOW filter chips + custom tag filter chips
- Bulk-action bar for selected or all channels
- Dry Contacts I/O pin state per transmitter

Load View

- System total power trend: 24-hour, week, or month range
- End-Use Breakdown donut (current kW share by tag)
- Tag filter chips — selection persists across page reloads
- 5-minute raw buckets (24h) · hourly roll-ups (week/month)

Advanced View

- Current kW instantaneous demand
- Today kWh — cumulative since midnight
- Peak kW — rolling 24-hour high + timestamp
- End-Use Loads table: kWh today, % of total, kW now, peak kW per tag



Included with every AGILE-CORE® HEADEND.

No Extra Cost

SPECIFICATIONS

Monitoring & Control

Live Channel Telemetry
Voltage, current, temperature, and fault state for every FMP channel. Updates every 2 seconds from VoltServer transmitters across the LAN.

Per-Channel & Bulk Control
ON / OFF / RESET on individual channels or selected groups. "All" commands act across every transmitter — always with confirmation.

Custom Naming & Tagging
Operator-assigned channel names sync back to the VoltServer transmitter — visible across all PowerView instances on the LAN.

Auto-Discovery
LAN subnet scan identifies unregistered Sinclair Digital transmitters. Add a device in seconds — no manual IP hunting required.

Full Audit Log
Every ON/OFF/RST, login, device add/edit, and settings change is timestamped and retained. All roles can view; admins can clear.

Analytics & Alerting

Per-Channel History Charts
1h / 24h / 7d / 30d range selector. Raw 5-minute readings retained 30 days; hourly roll-ups retained 365 days.

Load View
System-wide area/line power trend (24h, week, month) and real-time End-Use Breakdown donut chart by tag. Tag filter persists across sessions.

Advanced Power Metering
Instantaneous kW demand, cumulative kWh since midnight, rolling 24-hour peak kW, and per-tag metering table with % of total.

9 Proactive Alert Types
Severity-rated (Info / Warning / Critical) with first-seen / last-seen timestamps and optional SMTP email notifications.

- **Device OFFLINE** Transmitter unreachable
- **Channel FAULT** Overload, ground fault, etc.
- **OVERCURRENT** Exceeds warn / critical mA threshold
- **Transmitter TEMP** Internal overtemperature
- **Input VOLTAGE** Mains voltage out of range
- **Power Module** PSU minor or major alarm
- **Mgmt Module** Hardware fault flag
- **Receiver Fault** Connected receiver fault
- **Clock Skew** Timestamp drift >1 hour

Integration & Access Control

Unified REST API
One authenticated endpoint for all transmitters on the project. Integrators connect once — no per-device credentials required.

API Capabilities
Real-time state, time-series history, bulk control, device discovery, channel tagging, alert management, and user administration — all via REST.

Local-Only Architecture
SQLite database on the Sinclair® Digital Server. No cloud account, no internet dependency, no data leaves the building LAN.

One-Click Database Backup
Hot SQLite snapshot (no downtime) includes all devices, channels, history, users, alerts, and settings. Every backup is audit-logged.

Role-Based Access

- Administrator** Control · Manage devices, users & settings
 - Operator** Control channels — no device management
 - Viewer** Real-time & historical data — read-only
- UI elements hide themselves based on role — Viewers never see control buttons; Operators never see Settings.

Platform	Requirements	Stack	Data Retention	Version
Windows 10/11 64-bit or Windows Server 2019+	2-core CPU · 200 MB RAM · 500 MB disk · Port 5062	ASP.NET Core 8 · SQLite · Vue 3 · .NET bundled in installer	Raw readings: 30 days · Hourly roll-ups: 365 days	PowerView v1.00.02 · Included at no charge with AGILE-CORE® HEADEND