Security, Data, and Network Information
Setra Cems Software

Edge Device
The Edge device is owned by the customer.

Specifications

Hardware	Optically Isolated EIA-485, Ethernet Din-rail or panel-mount metal enclosure
Operations	Quad-core 1.2.GHz Broadcom 64-bit CPU 10 GB RAM 10 GB eMMC flash Linux Operating System
Protocols	Ethernet, WIFI 802.11, EIA-485
WIFI	2.4 GHz and 5.0 GHz IEEE 802.11ac
Ethernet Communication	10-BASE-T, 100BASE-TX 100m CAT5e cable length Dual Individual (non-switched) Ethernet Ports 10/100 Ethernet ports
Operating Temperature °F (°C)	32 to 140 (0 to 60)
Power	10–36 VDC 6W 24 VAC/VDC ±10% 4-pin power input connector for earth and redundant power connections
Power Draw	17W max, 4W typical, 17W max
BACnet/IP	Ethernet CAT5 cable
Website	http://setraedge.local
Acceptable Browsers	Edge, Chrome, Firefox, Safari
Language(s)	English
Communications	10/100 Mbps Ethernet or WIFI

Firmware
- Firmware updates are created by Setra but given to the customer to execute upgrading the hardware.
- Updates are needed as releases become available. Notifications will be sent to all customers with an upgrade package available.
- The firmware package should not be altered or tampered with when received.

Authentication

- Not single sign on (SSO) compatible
- No MFA enabled

CEMS Software

The Cems software is owned by Setra. The data for the customer's unique dashboard is owned by the customer. See MSA for more details.

Specifications

Website	Software as a Service – https://cems.setra-cloud.com
Acceptable Browser	Edge, Chrome, Firefox, Safari
Language(s)	English
Data Retention	2 Years by default (can be changed upon request)
Communication Protocol	MQTT, HTTPS
Alarm/Warning Notification	Dashboard alarm widget, Email/SMS notification, Configurable Alarm
Reporting	PDF, CSV, XLSX, DOC
Validated Software Features	IQ OQ Documentation, Report Validator, Sessions, User Signoffs
Reference Statements Upon Request	CEMS Product Security Statement Electronic Signature Compliance with 21 CFR Part 11
Infrastructure Deployment	Cloud

Updates

- Software updates are automatically done by Setra. See MSA for more details on notifications of release information.

Authentication

- Not single sign on (SSO) compatible
- No MFA enabled
- Access to CEMS portal is only through valid and unique credentials. CEMS enforces a strong password policy with minimum password strength requirements and regularly scheduled expiring passwords. Unauthorized attempts to login are blocked and logged.

Security

- 3rd party penetration testing
- Cems platform hosted by AWS which includes OWASP
- All data collected and stored by CEMS, including backups are encrypted by industry standard AES-256 algorithm
- All traffic to and from our CEMS software platform is encrypted using the SSL/TLS V1.2 protocol with strong TLS cipher suites. User access to CEMS web portal is limited to HTTPS only. Firewalls have been put in place and default to deny all policy combined with required exceptions to open required ports only (80/443 and 8883).

Network

- Hosted by AWS at cems.setra-cloud at 35.153.251.182 (one way outbound)
- Ports: 8883 – 9293
- Edge Needs unrestricted network access to the AWS
- Communicates over secure MQTT (**port 8883**) via TLS v1.2
- DNS resolution
- 3rd party penetration testing
- Platform EDGE is running on Embedded Linux
- No outside communication to the EDGE itself (refuses any connection)
- Ephemeral ports are 32768 – 32773