



## CH-S Series - Single Zone Control Hub

Designed to monitor vehicle emissions and battery charging stations to control Car Park Ventilation Systems to ensure unparalleled fixed gas detection capabilities.

- **Comprehensive Monitoring**  
Ensures safety by detecting hazardous carbon monoxide (CO), nitrogen dioxide (NO2) and/or Hydrogen presence (H2).
- **Greater Coverage**  
Allows monitoring of a larger area, up to 4 Sensors and 30,000 sq. ft., providing comprehensive surveillance and early detection.
- **More Control**  
Offers flexibility and customization options with user-adjustable setpoints, delays, outputs, and relays, along with manual fan activation, allowing tailored responses to varying conditions.
- **Enhanced Durability**  
Provides resilience against weather elements with rainproof water resistance and offers simple service and maintenance procedures, ensuring longevity and reliability.
- **Simplified Installation**  
Streamlines the installation process with preconfigured wiring, factory calibration, and customized programming, reducing setup time and complexity.
- **Effortless Upgrade**  
Seamlessly integrates with both new and existing building control systems, facilitating easy upgrades without significant infrastructure changes.



## TECHNICAL SPECIFICATIONS

CH-S Control Hub	
Input power	120 VAC, 50/60 Hz. 0.2A 24 VAC, 50/60 Hz. 1.0A
Power consumption	24 VA
Control relays	6 relays, 5A @ 125 VAC / 250 VA
Analog outputs	User-selectable 4-20 mA, 0.2-1 VDC, 1-5 VDC, or 2-10 VDC
Storage temperature	-58°F to 248°F (-50°C to 120°C)
Operating temperature	-4°F to 122°F (-20°C to 50°C)
Humidity	10% to 90% (non-condensing)
Display	4-digit numeric, red
Front panel indicators	10 LEDs, Power (green), Sensors 1-4 (yellow), Zones 1-2 (yellow), Alert 1-2 (red), Alarm (red)
Alarm	106 dB @ 10 cm, 3.8 kHz piezoelectric element
Sensor lifespan	Up to 10 years, end-of-life notification
Sensor calibration	Recommended recalibration every 2 years
Sensor capacity	Up to 4 sensors, maximum of 2 internally mounted sensors
Dimensions	8.15" W x 9.93" H x 2.70" D (21 cm W x 25 cm H x 7 cm D)
Weight	5.5 lbs (2.49 kg)
Housing	Gray, NEMA 3R, polycarbonate plastic
Performance	ANSI/ISA 92.00.01-2010 (R2015)
Electromagnetic interference	EN 50270, FCC Part 15 Subpart B
Environmental	RoHS

## CH-S MODELS

		Control Hub Only	Control Hub w/ CO & NO2 Detection
Voltage	24 V	CH-S 24 (#494100)	CH-S Dual 24 (#494102)
	120 V	CH-S 120 (#494101)	CH-S Dual 120 (#494103)
Sensor capacity		Up to 4 sensors	Dual sensors included, additional 2 sensors available

## CH-S REMOTE DETECTORS

Sensor Performance	CO	NO2	H2
Model (Item #)	RD-CO (#494104)	RD-NO2 (#494105)	RD-H2 (#494130)
Performance range	0-200 PPM	0-10.0 PPM	0-100% LEL
Performance resolution	1 PPM	0.1 PPM	1% LEL
Calibration point	100 PPM	5.0 PPM	50% LEL
Maximum overload	2,000 PPM	200 PPM	n/a
T90 response time	< 30 seconds	< 50 seconds	< 20 seconds
Coverage radius	50 ft.	50 ft.	40 ft.
Coverage area	7,500 sq. ft.	7,500 sq. ft.	5,000 sq. ft.
Sensor type	Electromechanical	Electromechanical	Catalytic bead
Long term output drift	< 5% per year	< 2% per year	< 5% per year
Expected sensor life	> 7 Years	> 5 Years	2 Years
Calibration duration	2 Years	1 Year	n/a

Note: RD-Dual (#494106) combines a CO and NO2 sensors into one remote detector.