Product Data Sheet for Analog Output Sensors

- Process Free Chlorine Sensor with Analog output A420-FCL
- Thiết bị IoT Gateway Thông minh STHC
- Ammonia Gas Sensor with Analog output AV10-G4-NH3
- SO2 Gas Sensor with Analog output AV10-G4-SO2
- CO2 Gas Sensor with Analog output AV10-CO2

Process Free Chlorine Sensor with Analog output A420-FCL

SKU: A420-FCL | **Doc No**: A420-FCL-DS-EN-10



A420-FCL-H1.PNG

Introduction

A420-FCL Free Chlorine Sensor is an excellent choice for continuous measurement of free (or residual) chlorine in swimming pools, spas, industrial applications, or dirty/colored samples where colorimetric methods are inadequate. This electrode utilizes 2-electrode amperometric measurement technology and the measured chlorine concentration is compensated by an internal temperature sensor. Analog output 4-20mA allow easily integrate into any Monitoring or Control systems.

- Affordable, complete, free chlorine electrode system;
- Long life with replaceable membrane and refillable electrolyte;
- Auto temperature-compensated output;
- 1⁄2” NPT fittings for easy installation in pipe or our available flow cell;
- Factory calibrated, no zero calibration required;
- Analog 4-20mA output;
- Plug & Play.

Typical Applications

A420-FCL can be used to monitor or control the residual chlorine in:

- Swimming pools;
- SPAs;
- Industrial Process;
- Municipal Water;
- ...

Specification

Sensing Technology	Two-electrode amperometric technology with gas permeable membranes (replaceable)
Measuring range	0-10mg/L or 0-20mg/L
Accuracy & Resolution	+/- 0.1 mg/L
Repeatability	+/- 0.05 mg/L (25 oC)
Response Time	T90 < 90s (25 oC)
Working Condition	0 .. 50 oC with pH = 5 .. 9
Working Pressure	0 .. 15 psig
Flow range	30 .. 60 L/h or 0.6 .. 1.3 cm/s
Output	4-20mA
Power supply	6..12VDC, avg. < 200mA
Conditioning	New, first start-up: at least 4hours Restart-up: < 30 min.
Calibration	One Point - Manual with DPD
Interferences	ClO2, Ozone, Bromine Cyanuric Acid compatible
Process connection	1/2" NPT

Wetted parts	PVC, Silicone, ABS, PES Silver-Silver Halide/Platinum
Sensor Cable	6m with BNC connector
Rating	IP68
Sensor Dimension	D21.3 x 219 (mm)
Sensor net weight	< 200 grams
Warranty	1 year for probe, membrane for 03 months

Ordering Code

Item code	**Descriptions**
A420-FCL-01	PROCESS RESIDUAL CHLORINE SENSOR WITH TEMPERATURE COMPENSATION, 0-10MG/L, IP68, 1/2" NPT SUBMERSIBLE, 4-20MA OUTPUT, 6-12VDC
A420-FCL-02	PROCESS RESIDUAL CHLORINE SENSOR WITH TEMPERATURE COMPENSATION, 0-20MG/L, IP68, 1/2" NPT SUBMERSIBLE, 4-20MA OUTPUT, 6-12VDC
Replaceable spare-parts	
RC66-MEM1	CHLORINE SENSOR MEMBRANE RC66
RF0CR2-125	CHLORINE INTERNAL FILLING GEL RC66, 125 ML
** Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.*	

⚠ Link to download datasheet: https://filerun.daviteq.com/wl/?id=xnbTBmp4jA1HbCh2ef1K7BbMeFtcFiBM

⚠ Link for manual:

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Thiết bị IoT Gateway Thông minh STHC

SKU: STHC | **Doc No**: STHC-DS-EN-10



Giới thiệu

STHC là bộ IoT gateway thông minh có kết nối WiFi 2.4GHz. Với cổng RS485 modbusRTU, nó cho phép kết nối nhiều thiết bị cảm biến, đồng hồ, PLC...STHC là 1 thiết bị 3 trong 1, nó vừa là một bộ thu thập dữ liệu, một bộ điều khiển logic và là một bộ gateway kết nối internet.

- Hỗ trợ kết nối WiFi 2.4GHz
- Hỗ trợ Modbus RTU
- Dãy nguồn cấp rộng
- Cấp bảo vệ IP67

Ứng dụng tiêu biểu

STHC được ứng dụng thu thập số liệu hay điều khiển cho:

- Các cảm biến hay thiết bị đo lường;
- Đồng hồ Điện, nước, gas;
- PLC
- Máy phát điện, máy nén khí.

Thông số kỹ thuật

Giao tiếp WiFi	802.11b/g/n, 2.4Ghz, anten trong
Các giao thức Fieldbus hỗ trợ	ModbusRTU x 01 port, 31 slaves, max 19.2 kpbs
Nguồn cấp	7..48VDC, avg 200mA, peak 1.5A
Bộ nhớ lưu dữ liệu	2MB Flash, tích hợp trên bo mạch

Đầu nối điện	M12, 4-pin, coding A
Phụ kiện đi kèm	pát lắp tường
Nhiệt độ và độ ẩm làm việc	-20..+60 độ C / 95%RH không ngưng tụ
Kích thước sản phẩm	H106xW73xD42
Trọng lượng tịnh	190 grams
Hộp/Cấp bảo vệ	Hợp kim Nhôm + Nhựa Polycarbonate. Cấp bảo vệ IP67.

Mã đặt hàng

Mã	Mô tả
STHC	Bộ IoT Gateway Thông minh, kết nối WiFi 2.4GHz, nguồn cấp 7-48VDC, RS485.

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Ammonia Gas Sensor with Analog output AV10-G4-NH3

SKU: AV10-G4-NH3

Doc No: AV10-G4-NH3-DS-EN-10

Introduction

AV10-G4-NH3 is an electrochemical-type gas sensor with a high sensitivity to low concentrations of NH3 gas, high selectivity, and a stable baseline. It is powered by a power supply of 15..36VDC and gives analog output 0-10VDC for easy integration.

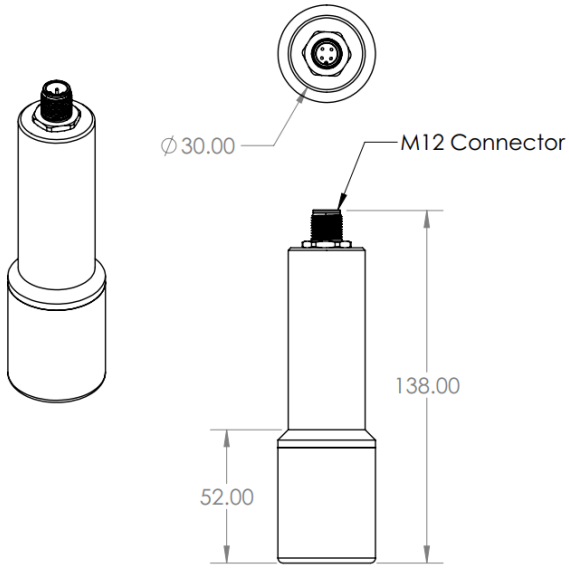
- High accuracy and stability;
- Wide range of Power Supply;
- Filter & Protector;
- Plug & Play.

Typical Applications

Ambient Gas Monitoring in Facilities, Farm, Building, Factory, City...

- Indoor Air Quality monitoring;
- HVAC Control;
- Greenhouse;
- Smart Agriculture.
- Gas Leak Detector.





Specification

SENSOR SPECIFICATION	
Sensor type	Daviteq Seri-4 electrochemical gas sensor
Nominal range	0-1000ppm
Resolution	0.1 ppm

Instability	+/- 0.66 ppm
T90 response time	< 35 s
Repeatability	< 3% of reading
Linearity	5% of full scale
Temperature compensation	Yes
Relative humidity range	15 % to 90 % RH non-condensing
Temperature range	-10 °C to 50 °C
Pressure range	Atmospheric ± 10%
Expected Operation Life	2 years in clean air
Expected Long-Term Output Drift in air	< 5 % of reading loss per 6 months
Filter & Protector	Nylon filter
Sensor housing / Rating	Plastic / IP67
OTHER SPECIFICATION	
Output	0..10VDC
Power supply	15..36VDC, avg. < 100mA
Connector	M12-female 4-pin Code A
Housing	Thermal Plastic
Housing Rating	IP67 (electronics housing and connector)
Dimension	H138xD30
Net weight	<200 grams

CROSS SENSITIVITY DATA

The table below does not claim to be complete. Interfering gases should not be used for calibration.

Interfering Gas	Concentration (ppm)	Reading (ppm)
Cl2	20	-55
CO	300	0
CO2	20000	0
H2	200	0
H2S	20	7
NO	20	-1
NO2	20	-20
SiH4	10	0
SO2	20	-7

ORDERING CODE

Item code	Descriptions
AV10-G4-NH3-1000-01	ANALOG OUTPUT 0-10VDC AMMONIA GAS NH3 SENSOR, 0-1000PPM, 15..36VDC SUPPLY, M12-F CONNECTOR
CALGAS-NH3-02	CALIBRATION CHARGES FOR GAS SENSOR, 2-POINT CALIBRATION
Please select below M12 cable with different lengths	
2M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=2M, ROHS, SHIELD 80%
5M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=5M, ROHS, SHIELD 80%
10M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=10M, ROHS, SHIELD 80%

⚠ Link for full datasheet:

⚠ Link for manual:

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SO2 Gas Sensor with Analog output AV10-G4-SO2

SKU: AV10-G4-SO2

Doc No: AV10-G4-SO2-DS-EN-10

Introduction

AV10-G4-SO2 is an electrochemical-type gas sensor with a high sensitivity to low concentrations of SO2 gas, high selectivity, and a stable baseline. It has built-in filter to remove effect from H2S and HCl. It is powered by a power supply of 15..36VDC and gives analog output 0-10VDC for easy integration.

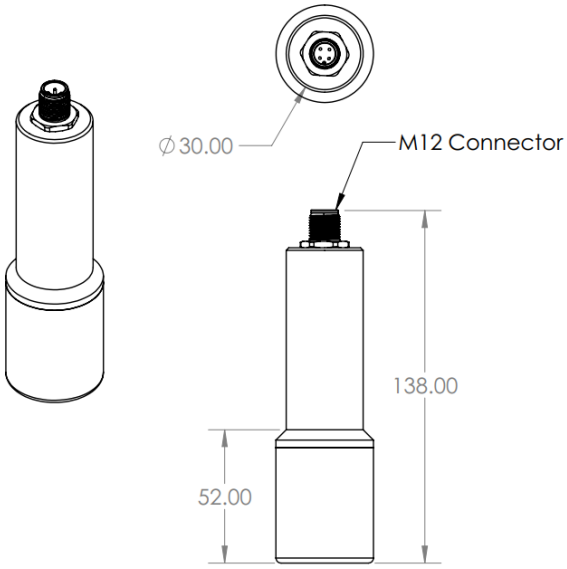
- High accuracy and stability;
- Wide range of Power Supply;
- Filter & Protector;
- Plug & Play.

Typical Applications

Ambient Gas Monitoring in Facilities, Farm, Building, Factory, City...

- Indoor Air Quality monitoring;
- HVAC Control;
- Greenhouse;
- Smart Agriculture.
- Gas Leak Detector.





Specification

SENSOR SPECIFICATION	
Sensor type	Daviteq Seri-4 electrochemical gas sensor
Nominal range	0-100ppm

Resolution	0.1 ppm
Instability	+/- 0.1 ppm
T90 response time	< 20 s
Repeatability	< 2% of reading
Linearity	5% of full scale
Temperature compensation	Yes
Relative humidity range	15 % to 90 % RH non-condensing
Temperature range	-40 °C to 50 °C
Pressure range	Atmospheric ± 10%
Expected Operation Life	3-5 years in clean air
Expected Long-Term Output Drift in air	< 10 % of reading loss per year
Filter & Protector	Nylon filter
Sensor housing / Rating	Plastic / IP67
OTHER SPECIFICATION	
Output	0..10VDC
Power supply	15..36VDC, avg. < 100mA
Connector	M12-female 4-pin Code A
Housing	Thermal Plastic
Housing Rating	IP67 (electronics housing and connector)
Dimension	H138xD30
Net weight	<200 grams

CROSS SENSITIVITY DATA

The table below does not claim to be complete. Interfering gases should not be used for calibration.

Interfering Gas	Concentration (ppm)	Reading (ppm)
C2H4	100	0
CO	100	< 3
CS2	100	35
H2	100	< 1
H2S	20	0
NO	100	0
NO2	100	~ - 125

ORDERING CODE

Item code	Descriptions
AV10-G4-SO2-100-F	ANALOG OUTPUT 0-10VDC SO2 GAS SENSOR, 0-100PPM WITH FILTER, 15..36VDC SUPPLY, M12-F CONNECTOR
CALGAS-SO2-02	CALIBRATION CHARGES FOR GAS SENSOR, 2-POINT CALIBRATION
Please select below M12 cable with different lengths	
2M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=2M, ROHS, SHIELD 80%
5M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=5M, ROHS, SHIELD 80%
10M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=10M, ROHS, SHIELD 80%

⚠ Link for full datasheet:

⚠ Link for manual:

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CO2 Gas Sensor with Analog output AV10-CO2

SKU: AV10-CO2

Doc No: AV10-CO2-DS-EN-10

Introduction

AV10-CO2 sensor utilizes CMOSens® Technology for IR detection enabling carbon dioxide measurements of the highest accuracy at a competitive price. Along with the NDIR measurement technology for detecting CO2 comes a best-in-class humidity and temperature sensor integrated into the same sensor module. Special algorithm expertise can measure ambient humidity and temperature by modeling and compensating external heat sources without needing additional components. It is powered by a power supply of 15..36VDC and gives analog output 0-10VDC for easy integration.

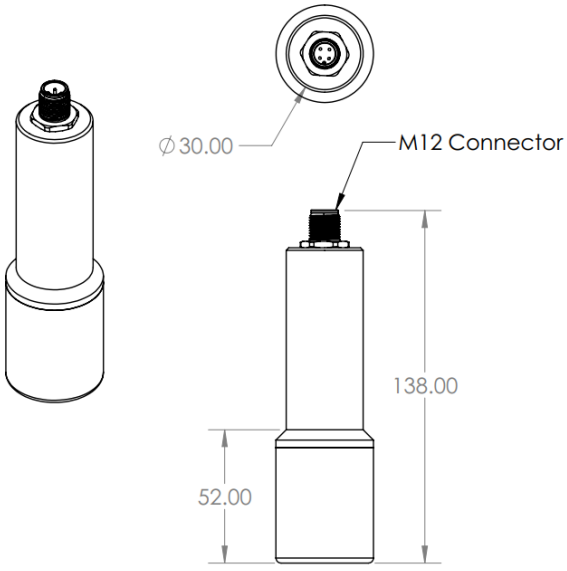
- High accuracy and stability;
- Wide range of Power Supply;
- Filter & Protector;
- Plug & Play.

Typical Applications

Carbon Dioxide is a key indicator of indoor air quality. Thanks to new energy standards and better insulation, houses have become increasingly energy-efficient, but the air quality can deteriorate rapidly. Active ventilation is needed to maintain a comfortable and healthy indoor environment and improve the well-being and productivity of the inhabitants. Daviteq sensor solutions offer accurate and stable monitoring of CO2 in the air and temperature and humidity. This enables our customers to develop new solutions that increase energy efficiency and simultaneously support the well-being of everyone.

- Indoor Air Quality monitoring;
- HVAC Control;
- Greenhouse;
- Smart Agriculture.
- Gas Leak Detector.





Specification

SENSOR SPECIFICATION	
Sensor type	Ultra-low power NDIR sensor
Nominal range	0-5000ppm
Resolution	1 ppm
Accuracy	+/- 30ppm + 3% reading
Repeatability	+/- 10ppm
Response Time	< 30s
Temperature compensation	Yes
Relative humidity range	0 % to 95 % RH non-condensing
Temperature range	0 °C to 50 °C
Pressure range	Atmospheric ± 10%
Expected Operation Life	up to 10 years in clean air
Expected Long-Term Output Drift in air	
Filter & Protector	Nylon filter
Sensor housing / Rating	Plastic / IP67
OTHER SPECIFICATION	
Output	0..10VDC
Power supply	15..36VDC, avg. < 100mA
Connector	M12-female 4-pin Code A
Housing	Thermal Plastic
Housing Rating	IP67 (electronics housing and connector)
Dimension	H138xD30
Net weight	

ORDERING CODE

Item code	Descriptions
AV10-CO2-5000-01	ANALOG OUTPUT 0-10VDC CO2 GAS SENSOR, 0-5000PPM, 15..36VDC SUPPLY, M12-F CONNECTOR
Please select below M12 cable with different lengths	
2M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=2M, ROHS, SHIELD 80%
5M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=5M, ROHS, SHIELD 80%
10M-MM12CAB4X0.25	M12 4PIN MALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=10M, ROHS, SHIELD 80%

⚠ Link for full datasheet:

⚠ Link for manual:

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