

# Ammonia (NH<sub>3</sub>) Transmitter



## AVC-410 Series

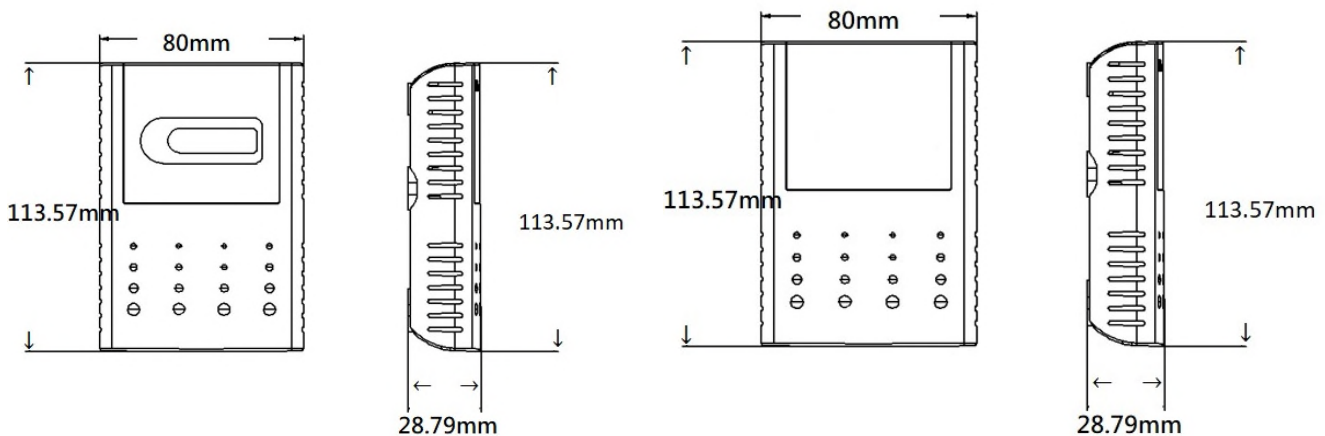
### ■ Features

Ammonia is a compound of nitrogen and hydrogen with the formula NH<sub>3</sub>. It is a common nitrogenous waste, particularly among aquatic organisms, and it contributes significantly to the nutritional needs of terrestrial organisms by serving as a precursor to food and fertilizers. Ammonia vapor has a sharp and irritating odor. Exposure to very high concentrations of gaseous ammonia can result in lung damage and death.

AVC-410 Ammonia (NH<sub>3</sub>) transmitter can monitor Ammonia level and send the data to monitoring center for analysis or for ventilation control. It can be used in restroom, basement, indoor parking, green house, hospital, fertilizer plant or livestock farm and etc.



### ■ Dimensions



## ■ Specifications

<b>Model</b>	<b>AVC-410</b>
Measurement method	Electrochemical
Response time	$\tau_{90} \leq 90$ sec
Measurement range	0 ~ 50ppm
Accuracy (at 25°C)	$\pm 5\%$ for 0~50.0ppm
Resolution	0.1ppm
Repeatability	Measurement $\pm 10\%$
Drift	Zero: $< \pm 10$ ppm /year; Span: $< 2\%$ reading /month
Coverage area	About 575m <sup>2</sup> <sup>(1)(4)</sup>
Signal output	RS485 (Modbus RTU); RS485/LoRa (Peer to Peer), radio frequency: 862 ~ 932 MHz <sup>(2)</sup>
Linearity error	$< 10$ ppm (at -10°C~ 50°C)
Calibration interval (Recommended)	12 months
Sensor lifespan	2 years <sup>(3)</sup>
Pressure range	1 atm $\pm 10\%$
Operating environment	-10 ~ +50°C (14~122°F); 0 ~ 95%RH (non-condensing)
Storage temperature	-10 ~ +50°C (14~122°F)
Warm-up time	$\leq 1.5$ min. (Full scale $\leq 15$ min.)
Power supply	DC 12 ~36V, AC 24V (50/60Hz)
Power consumption	RS485: 0.1W (Max.); LoRa / RS485: 1.2W (Max.)
Case material	Fireproof ABS
IP rating	IP30 (No protection from liquids)
Certifications	CE and FCC

- Note:**
- (1) The coverage area should be considered individually to account for the particular layout and any varying or enclosed spaces. It is recommended to install at least one device in each room.
  - (2) The frequency channels will be differed by country and this frequency can be configured accordingly from 862 to 932Hz.
  - (3) The lifespan of sensor might vary depending on environmental conditions. For example, high ambient temperature will shorten its lifespan.
  - (4) It is recommended to install about 50cm below ceiling.

## ■ Ordering information

**AVC-410**□□□-M

Code 1	Installation	Code 2	Output	Code 3	Display
W	Wall- mount	4	RS485	X	No
		6	RS485 / LoRa	D	Yes

\*For details, please refer to specifications.