AECL CO Detection Module

Idea for indoor air quality monitoring, security monitoring or wireless sensor networks to detect carbon monoxide concentration near the installation location.

Key Features:

- **Fast response and recovery time**
- **High stability**
- **Long life**
- **Low cost**

Application:

- **domestic CO detectors**
- **fired detection**
- **air quality monitors**

Specification

Model	CO-001M
Detection	Carbon monoxide
Principle	Electrochemical
Measurement Range	0 ~ 1,000ppm
Accuracy	± 5%
Response Time (90%)	< 30 Sec.
Temperature Drift	< 10ppm (-20 to 50℃)
Long Term Output Drift	< 5% (per year)
Expected Operating Life	> 6 years
Recommended Operation Temp.	-20 to 50 ℃
Recommended Operation Humidity	15 to 90% RH
Recommended Storage Temp.	0 to +20℃
Power Supply	2.7 ~ 3.6 VDC
Power consumption	TBD
Interface	I2C
Dimension (mm)	26(L) 21 (W) 18(H)

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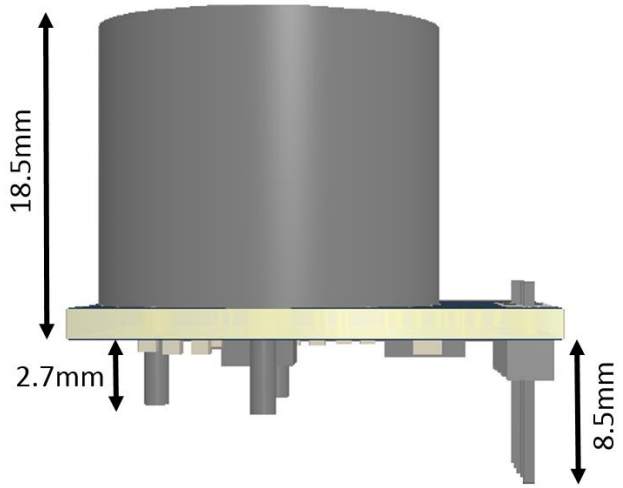
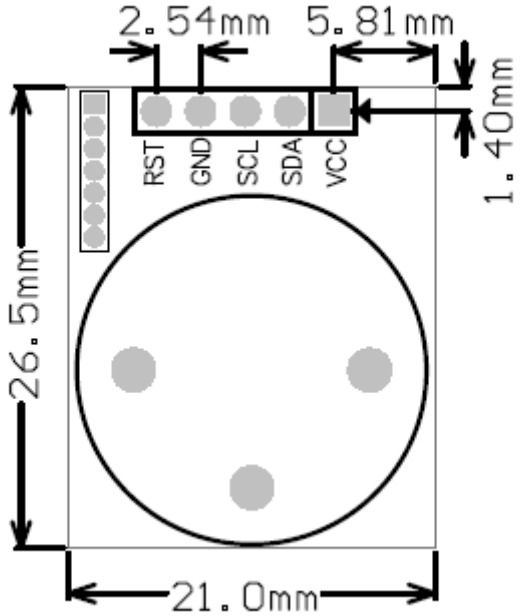
Aecl group : www.aecl.com.tw. 02-2223-5889

Dimensions and Wiring:





Pin#	Name	Function
1	VCC	Positive power supply
2	SDA	I2C data
3	SCL	I2C clock
4	GND	Ground
5	RST	Reset pin

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I2C Communication Protocol:

SAD+Read/Write patterns

I2C Command	SAD	R/W	SAD+R/W
Read	1001000(0x48)	1	10010001(0x91)
Write	1001000(0x48)	0	10010001(0x91)

Sub Address of CO Module

Sub Address of CO Module	Description
0xA0	Read CO Value

Master is receiving (reading) data from slave(CO Module)

Master(MCU)	ST	SAD+W		SUB		SR	SAD+R			MACK	
Slave(CO)			SACK		SACK			SACK	DATA		DATA

Master(MCU)	NMAK	SP
Slave(CO)		

Abbreviation

ST : Start
SP : Stop
SAD : Slave Address
SUB : Sub Address
SACK : Slave ACK
MACK : Master ACK
NMAK : No Master ACK

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