

CO2 Carbon dioxide Sensor

MST-N4L CO2 Datasheet



Application

- ◆ Environmental detection
- ◆ Gas leakage detection
- ◆ On-line monitoring

Advantages& characteristics

- ◆ Quick response and accurate measurement
- ◆ Will not get poisoned
- ◆ Working with no oxygen required
- ◆ More than 5 years lifespan
- ◆ Small size structure

Base Specification

- | | |
|-----------------------|--|
| ◆ Detection gas | CO2 |
| ◆ Working principle | Non-distributed infrared (NDIR) |
| ◆ Measuring range | 0-5000ppm, 1%/5%/10%/20%/50%/100%vol |
| ◆ Accuracy | 0-5000ppm: $\pm(50\text{ppm}+3\%\text{Truth value})$
vol: $\pm(0.02\%\text{vol}+3\%\text{Truth value})$ |
| ◆ Resolution | 1ppm/0.01%vol |
| ◆ Response time (T90) | <30s (Free diffusion) |
| ◆ Working temperature | -40℃ ~ 70℃ |
| ◆ Storage temperature | -40℃ ~ 85℃ |
| ◆ Working humidity | 0 ~ 95%RH, non-condensing |
| ◆ Preheating time | 1min |
| ◆ Digital output | TTL level |
| ◆ Analog output | 0.4 ~ 2V |
| ◆ Supply voltage | 3.0 ~ 5.5 VDC |
| ◆ Working current | Average <60mA @ 3.3VDC |
| ◆ Power consumption | 0.2W (Average value) |
| ◆ Lifespan | >5 years |
| ◆ Warranty | 1 year |
| ◆ Weight | 21g |

Pin specification

Pin mark	Function	Description
V+	Positive electrode of power supply	3.0 - 5.5 VDC
Gnd	Negative terminal of power supply	GND
Tx	Serial port transmitter	TTL TXD
Rx	Serial port receiver	TTL RXD
DA	Analog output	0V means sensor failure 0.2V means sensor in preheating 0.4-2V corresponds to 0-100% F.S. 2-2.2V means overrange

Size drawing (unit: mm)

