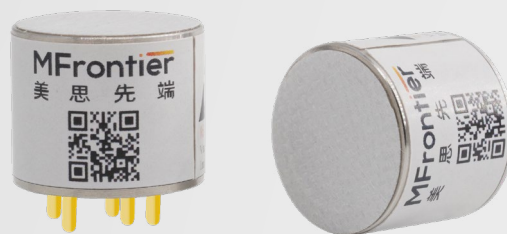# MPY20-CO$_2$

#4 Series Infrared Sensor

The 4# series infrared gas sensor is based on non-dispersive infrared technology (NDIR) and has a built-in 32-bit core industrial-grade microprocessor. It has fast computing speed, low power consumption, wide operating temperature range, wide detection range, and adopts the latest intelligent algorithm. High accuracy and good stability. It is used in various gas measurement scenarios in the industrial field, such as energy, municipal pipe networks, mines, pipelines and other scenarios with high gas environment requirements.

Mine monitoring   Cold chain transportation   Industrial monitoring

Public safety   Pipeline monitoring   Smart energy

Features

- Wide detection range

- Strong anti-interference ability

- No oxygen dependence, good stability

- Long lasting

- Short warm-up time and quick response

Products parameters

Principle	NDIR
Detection accuracy	0~0.2%: ±0.03；0~1%: ±0.04；0~5%: ±（0.05 + 5% of the true value); 0~20%: ± (0.05 + 6% of the true value)
Resolution	0~0.2%：20ppm；0~1%：50ppm；0~5%：100ppm；0~20%：0.05%
Response time	$T_{90} \leqslant 25s$
Boot stable time	60s
Long term drift	±1%FSD/month
Input voltage	3.2~5.5V DC typ：3.3V DC
Input Current	70~80mA；typ：75mA
Input current fluctuation	≤ ±5%，typ：±2%
Serial communication baud rate	19200~115200，typ：38400
Diameter	19.8~20.2mm，typ：20mm
Height	15.8~16.2mm，typ：16mm
Pin height	4.0~6.0mm，typ：5.0mm
Weight	＜ 15g
Lifetime	＞ 5 years