

# Dust Monitoring and Treatment

## GCG1000Z Dust Concentration Meter



### Application:

GCG1000Z dust concentration sensor is designed in accordance with the most advanced laser principle, and it adopts a revolutionary open structure to fundamentally avoid the problem of dust accumulation. The sensor integrates a photoelectric detection system, a display system, a self-calibration system, a processor system and a self-cleaning mechanism to measure the dust concentration online and in real time. It has such intelligent functions as automatic calibration, automatic cleaning and maintenance reminder, suitable for online monitoring of dust concentration in dusty environments such as underground coal mines, other mines, and workshops.

### Features:

- ◎ Using an open cavity structure. The dust-containing air flow can be measured without entering the inside of the instrument, which solves the problem of dust accumulation and reduces the workload of maintenance.
- ◎ Sampling by natural air flow, and no built-in sampling pump is required.
- ◎ Having intelligent functions such as zero-point self-correction, self-cleaning and maintenance reminder.
- ◎ Low-power design to meet the needs of long-distance deployment.

### Technical parameters:

- ◎ Measuring Range: (0.00~1000) mg/m<sup>3</sup>
- ◎ Measuring Accuracy: ±10%
- ◎ Signal Output Mode:
  - a) Frequency: (200~1000) Hz
  - b) Serial: RS485
  - c) Logical: 0V/5V
  - d) Analog: (1~5)mA, (4~20)mA, or (0~40)mA (customization needed)
- ◎ Operation Voltage: (9~24)V DC (Intrinsically safe power supply)
- ◎ Explosion-proof type: mining intrinsically safe (Ex-mark: Exia I Ma)
- ◎ Protection Class: IP65

