

JDA-500 Series

SMART – Anti-Explosive Gas Detector



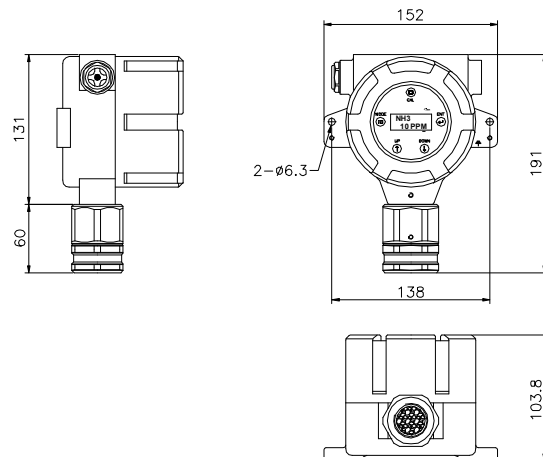
Specific Features

- ◆ **Digital Process**
Wide range of artificial intelligence is embodied through the digital process based on micro processor and gas may be more conveniently, accurately, and efficiently detected.
- ◆ **Non-Intrusive Auto-Calibration With Magnetic Switch**
The inconvenience to open the cover of detection part for calibration work by applying magnetic switch mechanism to automatic calibration function of digital processor. This function is especially effective in the calibration work in the anti-explosive area. (Zero, Span)
- ◆ **Self-Inspection**
Trouble of the product is checked by inspecting surrounding ICs.
- ◆ **LCD Display With Back-Light**
Detected level is displayed in LCD at real time for prompt identification of level and automatic back-light function is installed for easy identification of level even in the dark environment.
- ◆ **User Selection Menu**
The user may configure the function suitable to using environment with choosing calibrated gas level and detection range with use of micro processor.
- ◆ **Signal-Output**
The signals are smoothly transmitted by various output methods including sm2wire loop powered, 2-Step Relay Contact (Option), and RS-485 (Option).

Specification

| Item | JDA-500 Series |
|------------------------------------|---|
| Detection Mechanism | Catalyst Combustion, Electro-Chemical NDIR(Non-Dispersive Infrared),PID(Photoionization) |
| Detection Type | Diffusion 0 ~ 100%LEL, 0~10000PPM,0~100%VOL |
| Response Rate | Within 20 sec, 90%/Full Scale |
| Accuracy | ≤±2%/Full Sccale |
| Level Display | Back Light LCD(8Characters*2Line) |
| Sensor Calibration | Magnetic Switch |
| Selection Function | Setting calibration level and detection range |
| Input Power | DC 20 ~ 30V |
| Outside Output | 4 ~ 20mA/Full Scale - 2.5km transmission |
| Operation Temperature and Humidity | -20℃~60℃, 5~95% RH (Non-Condensing) |
| Signal Cable | CVVS & CVVSB 1.25sq x 3 Wire - Shield Type |
| Cable Conduit | 1/2" or 3/4" PF, NPT |
| Installation Method | Wall or Pipe Station |
| Outer Material | Cast Aluminum Alloy |
| Anti-Explosion Certificate | Ex d IIC T5 – Testing Laboratory (KTL) |
| Output Option | 2-Step Relay Contact (High/Low), RS-485 |

Dimension



JDA-500 Toxic Target Gas

| 氣體名稱 | 化學名稱 | 測量範圍 | 型號 |
|--------------------------|--------------------------------------|------------|--|
| Acetaldehyde | CH ₃ CHO | 0~500 ppm | JDA-500-CH ₃ CHO |
| Ammonia | NH ₃ | 0~100 ppm | JDA-500-NH ₃ |
| Arsine | AsH ₃ | 0~1.00 ppm | JDA-500-AsH ₃ |
| Arsenic Trichloride | AsCl ₃ | 0~1.00 ppm | JDA-500-AsCl ₃ |
| Arsenic Trifluoride | AsF ₃ | 0~10.0 ppm | JDA-500-AsF ₃ |
| Arsenic Pentafluoride | AsF ₅ | 0~10.0 ppm | JDA-500-AsF ₅ |
| Boron Trichloride | BCl ₃ | 0~15.0 ppm | JDA-500-BCl ₃ |
| Boron Tribromine | BBr ₃ | 0~15.0 ppm | JDA-500-BBr ₃ |
| Boron Trifluoride | BF ₃ | 0~10.0 ppm | JDA-500-BF ₃ |
| Butanethiol | C ₄ H ₉ SH | 0~10.0 ppm | JDA-500-C ₄ H ₉ SH |
| Carbonyl Fluoride | COF ₂ | 0~10.0 ppm | JDA-500-COF ₂ |
| Carbon Dioxide | CO ₂ | 0~5000 ppm | JDA-500-LCO ₂ |
| Carbon Dioxide | CO ₂ | 0~5.00 % | JDA-500-MCO ₂ |
| Carbon Dioxide | CO ₂ | 0~100 % | JDA-500-HCO ₂ |
| Carbon Monoxide | CO | 0~500 ppm | JDA-500-CO |
| Carbon Tetrachloride | CCl ₄ | 0~30.0 ppm | JDA-500-CCl ₄ |
| Chlorine | Cl ₂ | 0~10.0 ppm | JDA-500-Cl ₂ |
| Chlorine Dioxide | ClO ₂ | 0~2.00 ppm | JDA-500-ClO ₂ |
| Chlorine Trifluoride | ClF ₃ | 0~2.00 ppm | JDA-500-ClF ₃ |
| Diborane | B ₂ H ₆ | 0~1.00 ppm | JDA-500-B ₂ H ₆ |
| Dichlorosilane | SiH ₄ Cl ₂ | 0~10.0 ppm | JDA-500-SiH ₄ Cl ₂ |
| Disulfur Decafluoride | S ₂ F ₁₀ | 0~10.0 ppm | JDA-500-S ₂ F ₁₀ |
| Disulfur Dichloride | S ₂ Cl ₂ | 0~10.0 ppm | JDA-500-S ₂ Cl ₂ |
| Flourine | F ₂ | 0~10.0 ppm | JDA-500-F ₂ |
| Formic Acid | HCOOH | 0~500 ppm | JDA-500-HCOOH |
| Germane | GeH ₄ | 0~1.00 ppm | JDA-500-GeH ₄ |
| Germanium Chloride | GeCl ₄ | 0~10.0 ppm | JDA-500-GeCl ₄ |
| Hydrazine | N ₂ H ₄ | 0~10.0 ppm | JDA-500-N ₂ H ₄ |
| Hydrogen | H ₂ | 0~2000 ppm | JDA-500-H ₂ |
| Hydrogen Bromide | HBr | 0~10.0 ppm | JDA-500-HBr |
| Hydrogen Chloride | HCl | 0~10.0 ppm | JDA-500-HCl |
| Hydrogen Cyanide | HCN | 0~50.0 ppm | JDA-500-HCN |
| Hydrogen Fluoride | HF | 0~10.0 ppm | JDA-500-HF |
| Hydrogen Sulfide | H ₂ S | 0~100 ppm | JDA-500-H ₂ S |
| Iodine ² | I ₂ | 0~10.0 ppm | JDA-500-I ₂ |
| Isopropanol ² | (CH ₃) ₂ CHOH | 0~500 ppm | JDA-500-(CH ₃) ₂ CHOH |
| Methanol ² | CH ₃ OH | 0~500 ppm | JDA-500-CH ₃ OH |
| Nitric Oxide | NO | 0~100 ppm | JDA-500-NO |

| | | | |
|--------------------------------|-----------------------------------|-------------------|--|
| Nitrogen Dioxide | NO_2 | 0~20.0 ppm | JDA-500- NO_2 |
| Nitrogen Trifluoride | NF_3 | 0~30.0 ppm | JDA-500- NF_3 |
| Oxygen | O_2 | 0~30 % vol | JDA-500- O_2 |
| Ozone | O_3 | 0~1.00 ppm | JDA-500- O_3 |
| Phosgene | COCl_2 | 0~5.00 ppm | JDA-500- COCl_2 |
| Phosphine | PH_3 | 0~1.00 ppm | JDA-500- PH_3 |
| Phosphorus Trichloride | PCl_3 | 0~15.0 ppm | JDA-500- PCl_3 |
| Phosphorous | PCl_5 | 0~15.0 ppm | JDA-500- PCl_5 |
| Phosphoryl Chloride | POCl_3 | 0~10.0 ppm | JDA-500- POCl_3 |
| Silane | SiH_4 | 0~20.0 ppm | JDA-500- SiH_4 |
| Silicon Tetrachloride | SiCl_4 | 0~10.0 ppm | JDA-500- SiCl_4 |
| Stibin ² | SbH_3 | 0~1.00 ppm | JDA-500- SbH_3 |
| Sulfur Dioxide | SO_2 | 0~20.0 ppm | JDA-500- SO_2 |
| Sulfuryl Fluoride ² | SO_2F_2 | 0~10.0 ppm | JDA-500- SO_2F_2 |
| Sulfur Tetrafluoride | SF_4 | 0~9.00 ppm | JDA-500- SF_4 |
| Trichlorosilane | SiHCl_3 | 0~15.0 ppm | JDA-500- SiHCl_3 |
| Thiophene | $\text{C}_4\text{H}_4\text{S}$ | 0~50.0 ppm | JDA-500- $\text{C}_4\text{H}_4\text{S}$ |
| Tin Tetrabromide | SnBr_4 | 0~10.0 ppm | JDA-500- SnBr_4 |
| Tin Tetrachloride | SnCl_4 | 0~30.0 ppm | JDA-500- SnCl_4 |
| Tin Tetrafluoride | SnF_4 | 0~10.0 ppm | JDA-500- SnF_4 |
| Titanium Tetrachloride | TiCl_4 | 0~10.0 ppm | JDA-500- TiCl_4 |
| Trichlorosilane | SiHCl_3 | 0~10.0 ppm | JDA-500- SiHCl_3 |
| Trichlorotriazine | $\text{C}_3\text{Cl}_3\text{N}_3$ | 0~10.0 ppm | JDA-500- $\text{C}_3\text{Cl}_3\text{N}_3$ |
| Trifluorotriazine | $\text{C}_3\text{F}_3\text{N}_3$ | 0~10.0 ppm | JDA-500- $\text{C}_3\text{F}_3\text{N}_3$ |
| Vinyl Chloride | CH_2 | 0~10.0 ppm | JDA-500- CH_2 |
| Oxygen+Carbon Monoxide | O_2+CO | 0~30%, 0~1000 ppm | JDA-500- O_2+CO |