

**SMART Gas Detector/Transmitter(4~20mA)
with builtin TFT LCD & explosion proof**

DA-600S-TCD (H₂, He, Argon)

Auto - Sampling Type



GASDNA Co.,Ltd 101, Bukhang-ro 193beon-gil, Seo-gu, Incheon, 22856, Republic of Korea
Tell: +82-32-584-7420 Fax: +82-32-584-7424 E-mail: sales@gasdna.com Web: www.gasdna.com

<http://www.gasdna.com>

Product Introduction

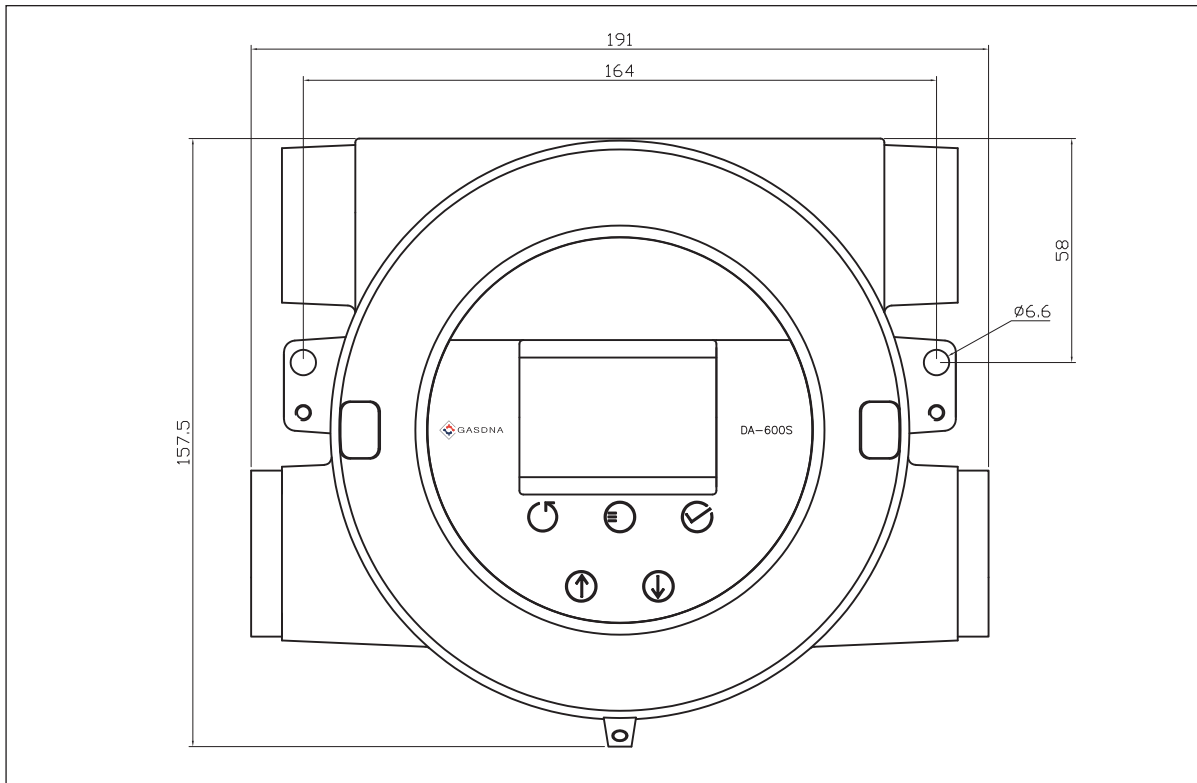
The DA-600S-TCD Thermal Conductivity Detector (TCD) analyzes inorganic gases (e.g., argon, nitrogen, hydrogen, carbon dioxide) and hydrocarbon molecules. It compares the thermal conductivity of two gas streams: a pure carrier (reference) gas and a sample gas. The electrically heated wire in the detector experiences temperature changes based on the thermal conductivity of the surrounding gas. These changes are detected and measured as variations in the wire's electrical resistance.

Product Specifications:

| Specification | Detail |
|---------------------------------------|---|
| Measuring Method | Sampling |
| Measuring Range | 0~100% LEL, 0~5%VOL, 0~100%VOL |
| Size | 191(W) x 158(H) x 135(D) |
| Display | 2.4" TFT LCD |
| Screen Size | 48.96mm × 36.72mm(2.4inch) |
| Screen Display | 5 magnetic switches with led confirmation |
| Warning light | RGB Color: RED, Orange & Green |
| Measuring Principle | TCD(Thermal conductivity) |
| Measuring gas | See the gas list |
| Detection Time(T90) | >15 Sec |
| Input Power | DC 20~30V, Maximum power of 10Watts |
| External Outputs | 4-20mA, Rs485 modbus, Relay x 2SPST(220V AC : 0.3A) |
| Ambient Temperatures & Humidity Range | -40°C ~ 55°C, 0 ~ 95% RH (Non-Condensing) |
| Mechanical interface | 2 x 3/4" NPT |
| Certification | Ex db IIC T6 Gb(IP6X), Ex tb IIIC T85°C Db(IP6X) |
| Sensor Life Expectancy | 5 years |
| Weight | 3.8 Kg |
| | |

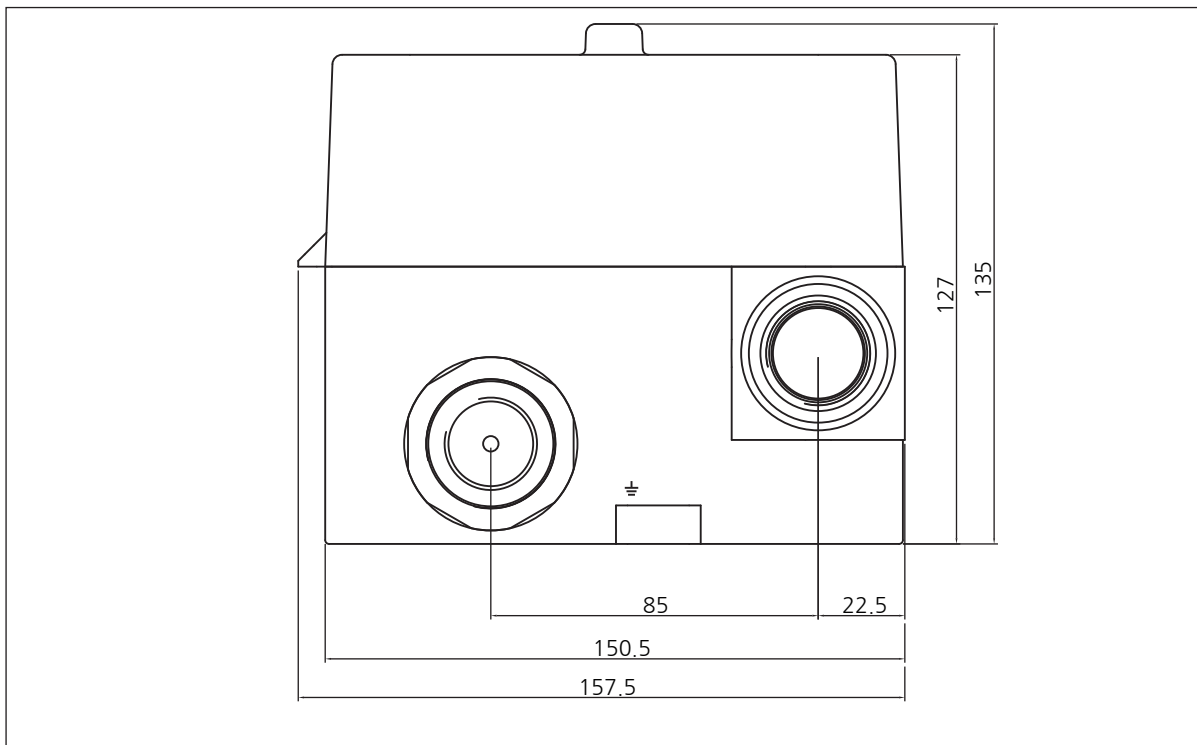
Product Installation

1. Front View



Unit: mm

2. Side View



Unit: mm

TCD Gas Measurement List

| Target Gas | Molecular Formula | Measurement Range |
|------------|-------------------|--------------------|
| Hydrogen | H ₂ | 0~4.00%, 0~100% |
| Argon | Ar | 0~5.00% |
| Helium | He | 0~5.00%, 0~100%VOL |
| Neon | Ne | 0~5.00% |