

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

DA-600S-NDIR

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

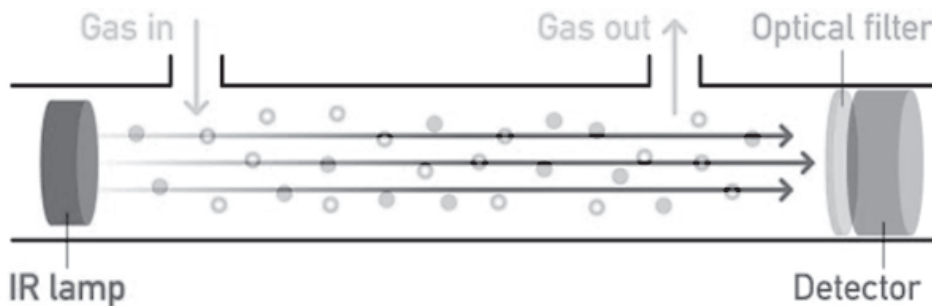
<http://www.gasdna.com>

Product Introduction

The DA-600S-NDIR detector is a non-dispersive infrared detector that uses a full-color LCD and RGB LED to enhance visibility and warning indication.

The DA-600S-NDIR meter is a non-dispersive infrared detector that measures Hydro Carbon and other toxic substances. The basic principle of the NDIR sensor is to utilize the infrared absorption characteristics of a specific wavelength. Each gas has its own infrared absorption spectrum, and this can be used to detect the presence and concentration of a specific gas. This NDIR technology is a very useful tool for accurately and quickly measuring the concentration of a specific gas component. It plays an important role in monitoring specific gases due to global warming, and is utilized in various industrial and environmental fields. NDIR sensors are easy to maintain due to their reliability and simple structure, and are suitable for real-time monitoring, so they are widely used in various applications.

NDIR Measurement Structure



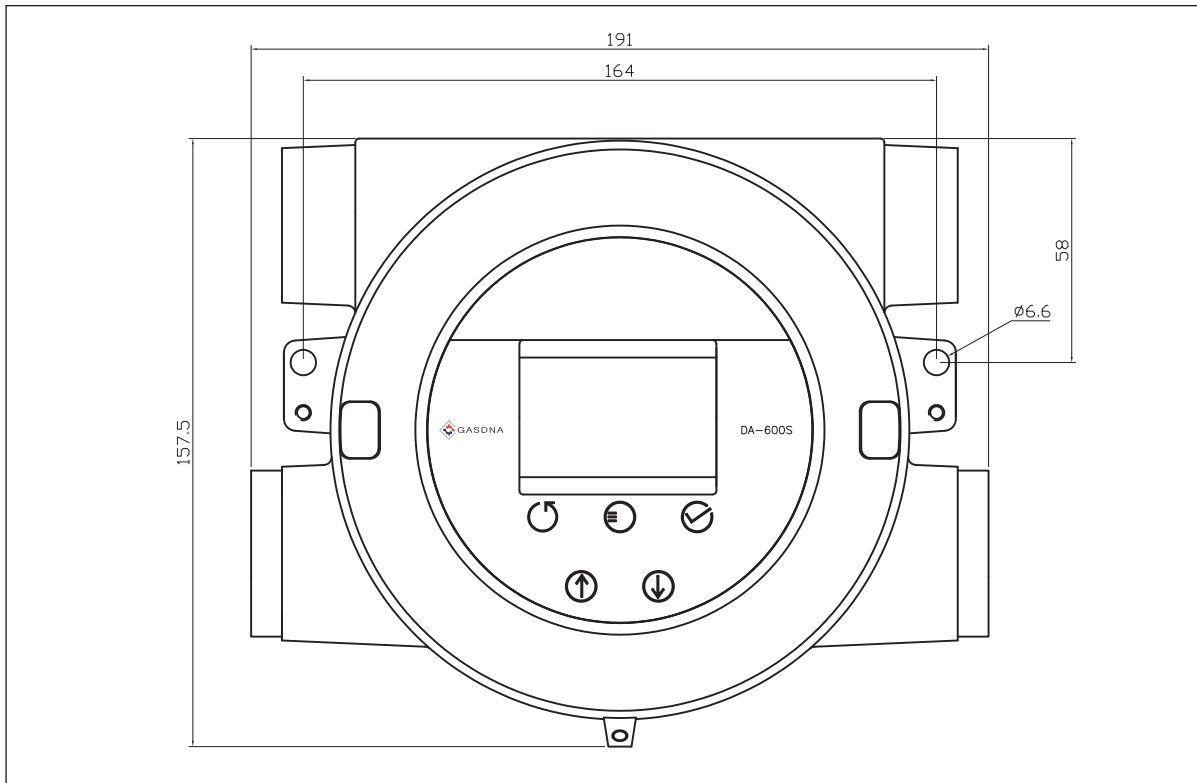
1. The infrared source (IR LAMP_ *infrared red) emits infrared.
2. The infrared that passes through the gas sample chamber is selectively absorbed by gas molecules.
3. The infrared passes through the filter (optical filter) and transmits only the specific absorption wavelength of the gas to the detector.
4. The detector detects the infrared that passes through the filter and converts it into an electrical signal.
5. This signal is proportional to the gas concentration, and the gas concentration is calculated through this.

Product Specifications

Specification	Detail
Measuring Method	Sampling
Measuring Range	0~2000PPM, 0~6000PPM, 0~100% LEL, 0~5.00%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	NDIR (Non-Dispersive Infrared)
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℃ ~ 55℃, 0 ~ 95% RH (Non-Condensing)
Mechanical interface	2 x 3/4"NPT
Certification	Ex db IIC T6 Gb(IP6X), Ex tb IIIC T85℃ Db(IP6X)
Sensor Life Expectancy	5 years
Weight	3.8 Kg

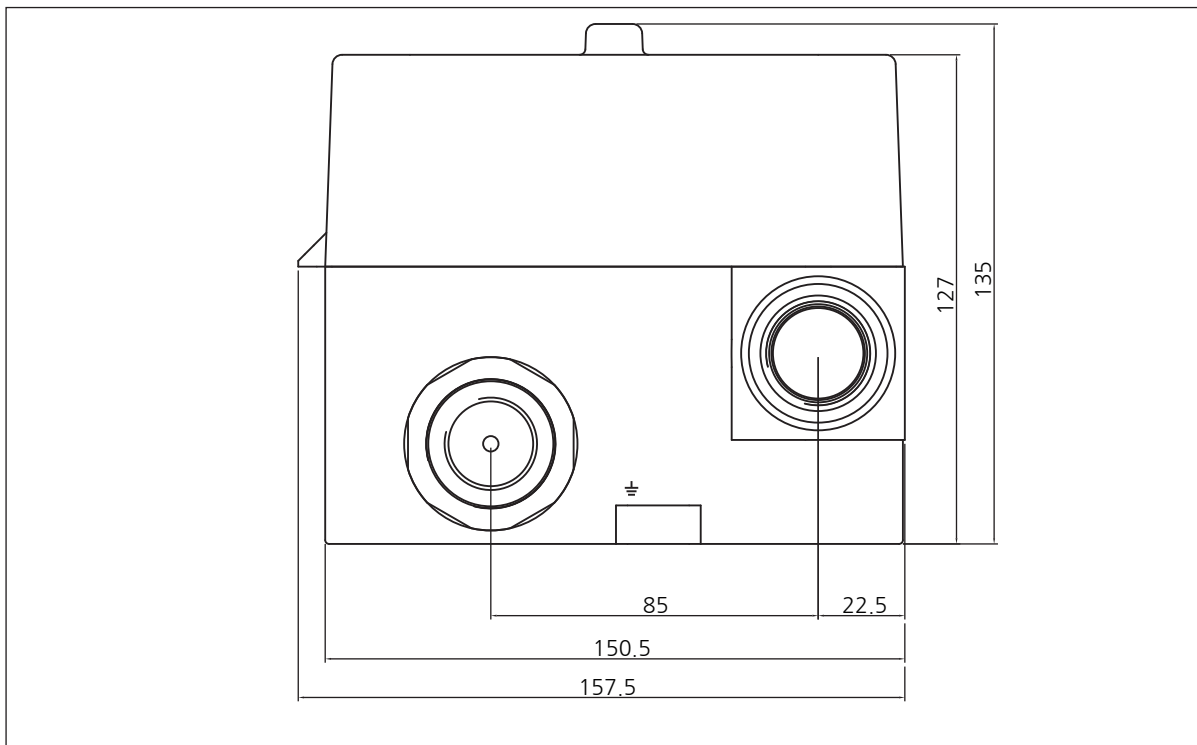
Product Diagram

1. Front View



unit : mm

2. Side View



unit : mm

NDIR Gas Measurement List

Target Gas	Chemical Formula	Measurement Range
Hexafluoroethane	C2F6	0~2000 PPM
Hexafluoro-1,3-butadiene	C4F6	0~2000 PPM
Octafluorocyclobutan	C4F8	0~2000 PPM
Octafluorocyclopentene	C5F8	0~2000 PPM
Methane	CH4	0~100 %LEL
Acrylic Acid	C3H4O2	0~100 %LEL
Epichlorohydrin	C3H5ClO	0~100 %LEL
Dimethylformamide	C3H7NO	0~100 %LEL
isobutylene	C4H8	0~100 %LEL
Tetrahydrofuran	C4H8O	0~100 %LEL
Ethyl methyl carbonate	C4H8O3	0~2000 PPM
Pentane	C5H12	0~100 %LEL
Phenol	C6H6O	0~100 %LEL
Propylene Glycol 1-Monomethyl Ether 2-Acetate	C6H12O3	0~2000 PPM
Ethylene Glycol Monobutyl Ether	C6H14O2	0~100 %LEL
Triethyl borate	C6H15BO3	0~2000 PPM
Allyl Methacrylate	C7H10O2	0~100 %LEL
Butyl Acrylate	C7H12O2	0~100 %LEL
Isobutyl Isobutyrate	C8H16O2	0~100 %LEL
Xylene	C8H10	0~100 %LEL
Octamethyltrisiloxane	C8H24O2Si3	0~2000 PPM
Carbon tetrafluoride	CF4	0~2000 PPM
Difluoromethane	CH2F2	0~2000 PPM
Dichloromethane	CH2Cl2	0~100 %LEL
Carbon dioxide	CO2	0~5000 PPM
Nitrous oxide	N2O	0~1000 PPM
Sulphur Hexafluoride	SF6	0~2000 PPM
TETRAETHYLORTHOSILICATE	TEOS	0~100 PPM
Refrigerants	R-227	0~2000 PPM
Refrigerants	R-125	0~2000 PPM
Refrigerants	R-290	0~100 %LEL
Refrigerants	R-134a	0~2000 PPM
Refrigerants	R-404a	0~2000 PPM
Refrigerants	R-407a	0~2000 PPM
Refrigerants	R-407f	0~2000 PPM
Refrigerants	R-410a	0~2000 PPM
Refrigerants	R-417a	0~2000 PPM
Refrigerants	R-1234yf	0~2000 PPM
Refrigerants	R-1234ze	0~2000 PPM
Refrigerants	R-448a	0~2000 PPM
Refrigerants	R-449a	0~2000 PPM
Refrigerants	R-507	0~2000 PPM
Refrigerants	R-32	0~2000 PPM
Refrigerants	R-452a	0~2000 PPM
Refrigerants	R-143a	0~2000 PPM