DUOPOINT

EXPLOSION-PROOF UNIVERSALGASDETECTOR

The DuoPoint features a universal transmitter structure compatible with various sensors. It allows for immediate compatibility when swapping sensors from contact catalytic bead type to electrochemical or infrared types. Additionally, it can be modified into Insert type or Remote type as needed. Through this technology, the DuoPoint ensures consistent safety across all sites.

FEATURES AND BENEFITS

Combustible Gas Detection

Detects 1 to 2 channels of target gases, including flammable, toxic gases, and oxygen.

Bluetooth Connection

Equipped with Bluetooth functionality that connects with a smartphone app.

External HART Port

Includes the first external HART port with intrinsic safety explosion-proof structure.

Explosion - Proof Design

Explosion-proof gas detector that can simultaneously mount more than two types of sensors.

Universal Compitablitiy

Features a universal transmitter structure that is immediately compatible with other types of sensors.

Rapid Situation Judgement

Enable rapid situation judgement through the multi-colour LED-diode beacon system

SENSOR SPECIFICATIONS

Measuring Method	Catalytic cell	Electrochemical cell	2Beam / 4Beam IR
Measuring Gas	Flammable gas	O2, Toxic gas	Hydrocarbon gas, CO2, CO, N2O
Measuring Range	0 ~ 100% LEL	0 ~ 25% VOL (O2), 0 ~ 50ppm (H2S), 0 ~ 200ppm (CO), 0 ~ 100ppm (NH3) & etc	0 ~ 100% LEL, 0 ~ 5% VOL (CO2), 0 ~ 1% VOL (CO2), 0 ~ 4000ppm (N2O)
Response time	< 15sec	O2: < 15 sec, Tx: < 45 sec	< 6 sec
Material	Stainless steel 316	Stainless steel 316	Stainless steel 316
Power Consumption	2.7W / 100mA@+24 VDC (18~31V)	0.3W / 12mA@+24 VDC (18~31V)	4.2W / 170mA@+24 VDC (18~31V)
Dimensions / Weight	65(W) x 63.3(H) x 65(D) mm / 0.7kg	65(W) x 87(H) x 65(D) mm / 1.0kg	68.6(W) x 120.7(H) x 68.6(D) mm / 1.0kg

DETECTOR SPECIFICATIONS

Measuring type	Diffusion type
Accuracy	±3% / Full scale
Output signal	Analog : Single 4 ~ 20mA or Dual 4 ~ 20mA (Option), Current source or Sink Digital : Isolated RS-485 Modbus (Option), HART (Option)
Material	Aluminium alloy or Stainless steel
Cable entry thread	M20 x 1.5P (Standard) | M25 x 1.5P, NPT 1/2", NPT 3/4", PF 1/2", PF 3/4"
Operating temperature	-40 C ~ 80 C
Operating humidity	0 ~ 99% RH (Non condensing)
Dimensions	170(W) x 147(H) x 114(D) mm (Aluminium alloy) / 170(W) x 145(H) x 110.5(D) mm (Stainless steel)
Weight	1.9kg (Aluminium alloy) | 3.5kg (Stainless steel)
Smart Sensor Configuration	Diffusion (Basic), Insert, Suction type | Up to 3 Smart sensors can be configured | Remote sensor max 100m (With Junction box)
Parameter control	Non-intrusive control with a Magnet bar and Bluetooth wireless communication (Calibration, Maintenance, Alarm setting)
Operation mode display	Alarm light ring (10 LED Array) | Power, Alarm, Status and Fault LED
Measuring value display	Graphic OLED display (Gas value, Gas name, Gas trend, Fault etc.), Multi language (English, Chinese)
Alarm signal output (Option)	6A @ 30VDC, 6A @ 250VAC (Resistive load) | 3-SPDT Relay contact (2 Stage alarm, 1 Trouble)

DETECTOR SPECIFICATIONS

Power	24VDC nominal, 18 to 31VDC | Max 4.8W (200mA @+24 VDC)
Additional interface	Bluetooth, MicroSD Card and Internal HART Port & External I.S. HART Port (Option)
Fault Check	Supply voltage / Current, Memory (Ram, Flash, Eepoom) check, Sensor status / Configuration check, System check

DETECTOR CERTIFICATIONS

Explosion-Proof Certification	KCs	Korean Explosion - Proof Certification	Ex db ia [ia Ga] IIC T6,T5,T4 Gb / Ex db IIC T6,T5,T4 Gb Ex db ia IIC T6,T5, T4 Gb / Ex tb IIIC T80 / T90 / T100 Db
	NEPSI	Chinese Explosion-Proof Certification	Ex db ia [ia Ga] IIC T6,T5,T4 Gb / Ex db IIC T6,T5,T4 Gb Ex db ia IIC T6,T5,T4 Gb / Ex tb IIIC T80 / T90 / T100 Db
	ATEX	European Explosion-Proof Certification	Ex db ia [ia Ga] IIC T6,T5,T4 Gb / Ex db IIC T6,T5,T4 Gb Ex db ia IIC T6,T5,T4 Gb / Ex tb IIIC T80 / T90 / T100 Db
	IECEx	International Explosion-Proof Certification	Ex db ia [ia Ga] IIC T6,T5,T4 Gb / Ex db IIC T6,T5,T4 Gb Ex db ia IIC T6,T5,T4 Gb / Ex tb IIIC T80 / T90 / T100 Db
Other Certifications	SIL2	Safety Integrity Certification	IEC61508, EN50402, EN50271
	CE(EMC)	European Electromagnetic Certification	EN50270, EN30032
	KC	Korean Electromagnetic Certification	
	HART	Communication Protocol Certification	
	CE(RoHS)	European Hazardous Substances Certification	

FOR MORE INFORMATION
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