

### Product overview

The GDR multi-function gas detector is of military grade EMC module and capable of dealing with harsh field environment disturbance; It's of super black box function with detailed operation and alarm record, overtemperature use record, excess moisture use record and outrange use record. Pumping test and simple pretreatment capacity; Full range temperature and humidity compensation and more accurate measurement accuracy



### Technical indicators

Detected gas	Combustible gas, poisonous gas and oxygen (refer to attached list of gases for the detail)	Detection principle	Catalytic oxidation, electrochemistry, infrared and PID
Range selection	Consult the manufacturer	Resolution ratio	Based on the measuring range
Accuracy	$\leq \pm 3\%$ FS (normal accuracy) $\leq \pm 1\%$ FS (high accuracy)	Repeatability	$\leq 1\%$ F.S
Response time	$\leq 3s$ (T1); $\leq 15s$ (T90)	Recovery time	$\leq 20s$ (T90-T10)
Display mode	320 * 240 high-definition color screen 2.0寸	Visual range	$\geq 10m$ (5.0 eyesight)
Operating voltage	12-35VDC (typical 24VDC)	System language	Switchable between Chinese (default) and English
Signal output: (Optional)	Consult the manufacturer for other output mode of three-wire system 4-20mA + RS-485 + WIFI + 2 relay	Environmental requirements	Operating temperature: $-40^{\circ}C \sim 50^{\circ}C$ Humidity range: 10% ~ 95%RH (without condensation) Pressure range: 86KPa ~ 106KPa
Operating mode	Key	Installation way	Wall-mounted
Quantity of relays	Two pieces (two sets of on-off output 2A @ 30VDC 或 0.6A@125VAC)	Size:	245 * 185 * 85mm (length * width * thickness)
Explosion-proof certification	Double explosion-proof standard Exd IIC T6	Temperature and humidity compensation	Full range temperature and humidity compensation

## Product model selection

GDR	Multi-function gas online detector	
Detected gas (Multiple choices, consult the manufacturer for the detail)	01	Carbon oxide CO
	02	Oxygen O <sub>2</sub>
	03	Hydrogen sulfide H <sub>2</sub> S
	04	Hydrogen H <sub>2</sub>
	05	Sulfur dioxide SO <sub>2</sub>
	06	Hydrogen peroxide (H <sub>2</sub> O <sub>2</sub> )
	07	Nitric oxide NO
	08	Chlorine Cl <sub>2</sub>
	09	Hydrogen chloride HCl
	10	Hydrogen phosphide PH <sub>3</sub>
	11	Formaldehyde CH <sub>2</sub> O
	12	Ethylene oxide C <sub>2</sub> H <sub>4</sub> O
	13	Hydrazine N <sub>2</sub> H <sub>4</sub>
	14	Hydrogen NH <sub>3</sub>
	15	Hydrogen chloride HCN
	16	Sulfur hexafluoride SF <sub>6</sub>
	17	Silane SiH <sub>4</sub>
	18	Hydrogen peroxide H <sub>2</sub> O <sub>2</sub>
	19	Phosgene COCl <sub>2</sub>
	20	Carbon dioxide (CO <sub>2</sub> )
	21	Fluorine F <sub>2</sub>
	22	Methane (CH <sub>4</sub> )
	23	Hydrogen selenide SeH <sub>2</sub>
	24	Hydrogen chloride HF
	25	Carbon dioxide CO <sub>2</sub>
	26	Ethylene C <sub>2</sub> H <sub>4</sub>

Detected gas (Multiple choices, consult the manufacturer for the detail)	27	Hydrogen bromide HBR	
	28	Bromine gas BR2	
	29	Arsenic oxide ASH3	
	30	Oxygen 3	
	31	Organic volatile TVOC	
	32	Combustible gas LEL	
Measuring range	L	0~100%LEL	
	H	0-25%VOL	
	F	0~100ppm/0-100mg/m3	
	K	0~1000ppm/0-1000mg/m3	
	W	0~10000ppm/0~10000mg/m3	
Output signal	1	RS-485	
	2	4-20mA	
	3	0~5/10V	
	4	Wireless signal	
Display and acousto-optic alarm	1	Without display or acousto-optic alarm	
	2	With display, but no acousto-optic alarm	
	3	With display and acousto-optic alarm	
	4	Without display, but acousto-optic alarm	
Testing mode	1	Diffusion type	
	2	Flow-through type (pumping type)	
	3	Pipeline type	
	4	Conventional split type ( $\leq 30\text{cm}$ )	
	5	Special split type ( $\leq 10\text{cm}$ )	
Explosion-proof type	D	Intrinsic safety type	
	E	Explosion-proof type	
Integrated power supply mode	U	Internal battery power supply	
	V	Battery and 24VDC double selection power supply	
	S	External 24VDC power supply	