

Jinbo Marine

Marine & Offshore Equipment Datasheet

PRODUCT DATASHEET

MONITORING AND ALARMING DEVICE

ESD3000IR Infrared Gas Detector

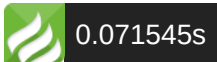
Introduction •Infrared Gas Detector in industrial application •Ex-proof certificate Exd IIC T6 Gb •Dust Ex-proof certificate Ex tD A21 IP66 T80°C •Site LCD display •HART communication •Changeable sensor d...

ISO9001 Supplier

Class Certificate

Export Supply

	<h3>Key Highlights</h3>	
	Category	Monitoring And Alarming Device
	Standard	ISO
	Material	ESD3000IR 1 Display LCD 12 Screw connection M20X1.5, 1/2NPT internal thr...
	Weight / Size	ESD3000IR 1 Display LCD 12 Screw connection M20X1.5, 1/2NPT internal thr...
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS	
<p>We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.</p>		

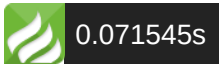


Technical Specifications			
Category	Monitoring And Alarming Device	Model / SKU	ESD3000IR-Infrared-Gas-Detector
Standard	ISO	Material	<p>ESD3000IR 1 Display LCD 12 Screw connection M20X1.5, 1/2NPT internal thread (select G3/4 or G1/2 or 3/4NPT) 2 Detected gases combustible gas/CO2 13 Weight 2.17kg (aluminum alloy)/4.1kg (stainless steel) 3 Detecting principle Infrared Spectroscopy 4 Measurement Range 0 ~ 100%LEL (combustible gas)/0 ~ 5%v/v (CO2) 14 Explosion proof certificate Exd IIC T6 Gb/Ex t D A21 IP66 T80°C 5 Accuracy ±3%LEL (combustible gas)/±3%FS (CO2) 15 Fire safety certificate CCCF 6 Repeatability ±2% 16 China metrology certification CMC 7 Response time T90 < 20S 17 Standard GB 15322.1-2003, GB 3836.1-2010, GB 3836.2-2010, GB 3836.4-2010, GB 12476.1-2013, GB 12476.4-2010 , GB 12476.5-2013, JJF 1368-2012 8 Power supply 24VDC (normal work voltage scope : 10 ~ 30VDC) 9 Power consumption < 2.5W 18 IP rating IP66 10 Output signal 3-wire 4~20mA+HART+relay (1A@24VDC)+audial & visual alarm (96dB @0.1m) 19 Temperature scope -40°C ~ 70°C 11 Main material ADC12 aluminum alloy/316 stainless steel 20 Humidity scope 10 ~ 95%RH(non-condensing) 21 Atmospheric pressure 86 ~ 106KPa Flammable Gases Detectable by ESD3000IR Description No.</p>



<p>Weight / Size</p> <p>ESD3000IR 1 Display LCD 12 Screw connection M20X1.5, 1/2NPT internal thread (select G3/4 or G1/2 or 3/4NPT) 2 Detected gases combustible gas/CO2 13 Weight 2.17kg (aluminum alloy)/4.1kg (stainless steel) 3 Detecting principle Infrared Spectroscopy 4 Measurement Range 0 ~ 100%LEL (combustible gas)/0 ~ 5%v/v (CO2) 14 Explosion proof certificate Exd II C T6 Gb/Ex t D A21 IP66 T80°C 5 Accuracy ±3%LEL (combustible gas)/±3%FS (CO2) 15 Fire safety certificate CCCF 6 Repeatability ±2% 16 China metrology certification CMC 7 Response time T90 < 20S 17 Standard GB 15322.1-2003, GB 3836.1-2010, GB 3836.2-2010, GB 3836.4- 2010, GB 12476.1-2013, GB 12476.4-2010 , GB 12476.5-2013, JJF 1368-2012 8 Power supply 24VDC (normal work voltage scope : 10 ~ 30VDC) 9 Power consumption < 2.5W 18 IP rating IP66 10 Output signal 3-wire 4~20mA+HART+relay (1A@24VDC)+audial & visual alarm (96dB @0.1m) 19 Temperature scope -40°C ~ 70°C 11 Main material ADC12 aluminum alloy/316 stainless steel 20 Humidity scope 10 ~ 95%RH(non- condensing) 21 Atmospheric pressure 86 ~ 106KPa Flammable Gases Detectable by ESD3000IR Description No.</p>	<p>Certificate</p> <p>ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS</p>
<p>Warranty</p> <p>12 Months unless specified otherwise</p>	<p>Origin</p> <p>China</p>

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Introduction

- Infrared Gas Detector in industrial application
- Ex-proof certificate Exd IIC T6 Gb
- Dust Ex-proof certificate Ex tD A21 IP66 T80°C
- Site LCD display
- HART communication
- Changeable sensor design
- Optional in auidal and visual alarm with relay output

Specifications

No.	Items	ESD3000IR	No.	Items	ESD3000IR
1	Display	LCD	12	Screw connection	M20X1.5, 1/2NPT internal thread (select G3/4 or G1/2 or 3/4NPT)
2	Detected gases	combustible gas/CO ₂	13	Weight	2.17kg (aluminum alloy)/4.1kg (stainless steel)
3	Detecting principle	Infrared Spectroscopy			
4	Measurement Range	0 ~ 100%LEL (combustible gas)/0 ~ 5%v/v (CO ₂)	14	Explosion proof certificate	Exd IIC T6 Gb/Ex t D A21 IP66 T80°C
5	Accuracy	±3%LEL (combustible gas)/±3%FS (CO ₂)	15	Fire safety certificate	CCCF
6	Repeatability	±2%	16	China metrology certification	CMC
7	Response time	T90 < 20S	17	Standard	GB 15322.1-2003, GB 3836.1-2010, GB 3836.2-2010, GB 3836.4-2010, GB 12476.1-2013, GB 12476.4-2010 , GB 12476.5-2013, JJF 1368-2012
8	Power supply	24VDC (normal work voltage scope : 10 ~ 30VDC)			
9	Power consumption	< 2.5W	18	IP rating	IP66



10	Output signal	3-wire 4~20mA+HART+relay (1A@24VDC)+audial & visual alarm (96dB @ 0.1m)	19	Temperature scope	-40°C ~ 70°C
11	Main material	ADC12 aluminum alloy/316 stainless steel	20	Humidity scope	10 ~ 95%RH(non-condensing)
			21	Atmospheric pressure	86 ~ 106KPa

Flammable Gases Detectable by ESD3000IR

No.	Description	Formula	No.	Description	Formula
K001	Methane	CH ₄	K022	Pentane	C ₅ H ₁₂
K002	Methylbenzene	C ₆ H ₅ CH ₃	K023	Hexane	CH ₃ (CH ₂) ₄ CH ₃
K003	Methanol	CH ₃ OH	K024	Heptane	C ₇ H ₁₆
K004	Methyl formate	HCOOCH ₃	K025	Octane	CH ₃ (CH ₂) ₃ CH ₃
K005	Ethyl formate	HCOOCH ₂ CH ₃	K026	Nonane	CH ₃ (CH ₂) ₇ CH ₃
K006	Ethyl methyl ether	CH ₃ OCH ₂ CH ₃	K027	Carbon monoxide	CO
K007	Ethane	CH ₃ CH ₃	K028	Ammonia	NH ₃
K008	Ethyne	CH≡CH	K029	Hydrogen	H ₂
K009	Ethanol	CH ₃ CH ₂ OH	K030	Benzene	C ₆ H ₆
K010	Ethylbenzene	CH ₃ CH ₂ C ₆ H ₅	K031	Iso-butane	(CH ₃) ₂ CH CH ₃
K011	Ethylene	CH ₂ =CH ₂	K032	Isopropanol	(CH ₃) ₂ CH OH
K012	Methyl acetate	CH ₃ COOCH ₃	K033	1-Butanol	CH ₃ (CH ₂) ₂ CH ₂ OH
K013	Ethyl acetate	CH ₃ COOCH ₂ CH ₃	K034	Cyclohexane	CH ₂ (CH ₂) ₄ CH ₂

K014	N-butyl acetate	$\text{CH}_3\text{COOCH}_2(\text{CH}_2)_2\text{CH}_3$	K035	Cyclopentane	$\text{CH}_2(\text{CH}_2)_3\text{CH}_2$
K015	Propane	$\text{CH}_3\text{CH}_2\text{CH}_3$	K036	Epoxypropane	$\text{CH}_3\text{CHCH}_2\text{O}$
K016	Propanol	$\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$	K037	Ethylene oxide	$\text{CH}_2\text{CH}_2\text{O}$
K017	Propylene	$\text{CH}_2=\text{CHCH}_3$	K038	Diethyl ether	$(\text{CH}_3\text{CH}_2)_2\text{O}$
K018	Acetone	$(\text{CH}_3)_2\text{CO}$	K039	Dimethyl ether	$(\text{CH}_3)_2\text{O}$
K019	Butane	C_4H_{10}	K040	Xylene	$\text{C}_6\text{H}_4(\text{CH}_3)_2$
K020	Butanone	$\text{CH}_3\text{CH}_2\text{COCH}_3$	K041	Gasoline	$\text{C}_4\sim\text{C}_{12}$ hydrocarbon mixture
K021	Butadiene	$\text{CH}_3\text{CH}_2\text{COCH}_3$	K042	Jet fuel, kerosene	$\text{C}_9\sim\text{C}_{16}$ hydrocarbon mixture