

# SD-10X

## Smart Transmitter Detector

- ATEX / IECEx certificate
- Flameproof enclosure for Acetylene and Hydrogen
- IP65 ingress class
- Small, rugged, dust and weather proof construction
- One man maintenance by magnetic control key
- Self diagnosis by microprocess or diagnosis

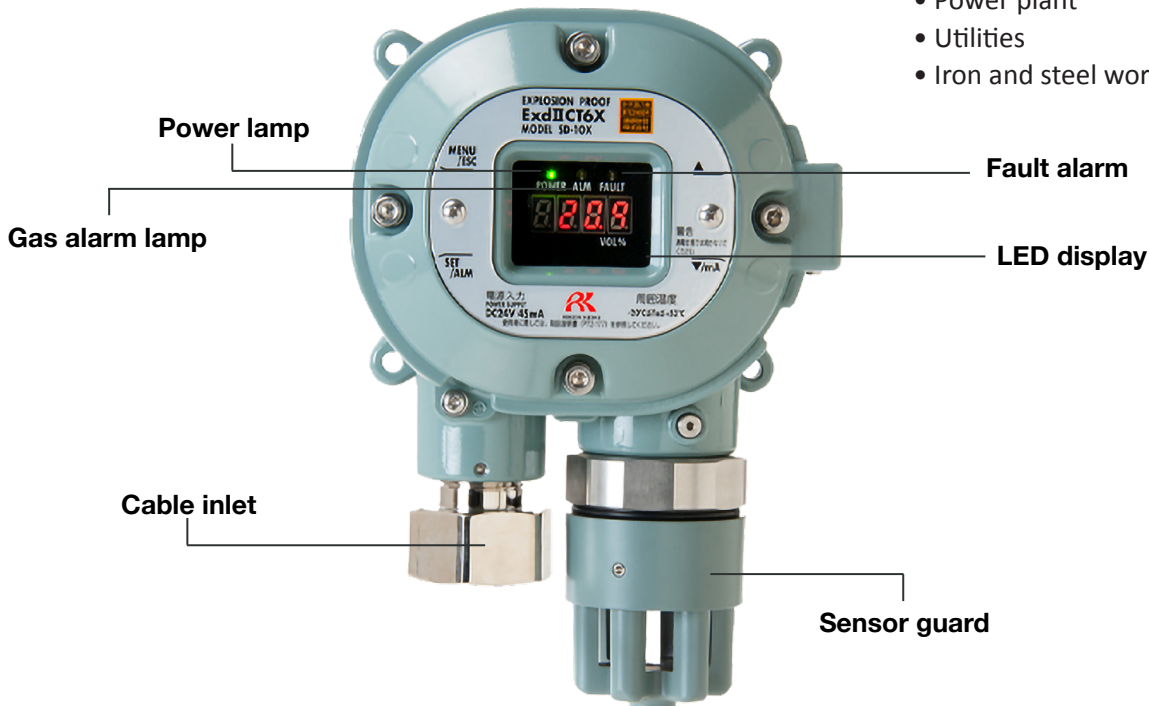


### Overview

Our SD-1 line of smart transmitters feature state-of-the-art gas detectors with durable flameproof enclosure, maximum safety, especially in hydrogen/acetylene atmospheres. A simple magnetic control key is placed over clear marked positions on the surface plate to test and adjust the instrument without opening the transmitter in situations with danger of explosion.

### Applications

- LNG Terminal
- Petrochemical/Chemical plants
- Power plant
- Utilities
- Iron and steel works



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 Information

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Common Specifications	
<b>Model</b>	SD-10X
<b>Detection principle</b>	Galvanic cell type
<b>Detection target gas</b>	Oxygen
<b>Detection method</b>	Diffusion type
<b>Detection range</b>	0–25.0 vol%
<b>Alarm setpoints</b>	18.0 vol%
<b>Alarm accuracy</b> (for identical conditions)	The difference between the alarm setpoint and the concentration reading when the alarm is triggered is 0.
<b>Alarm delay</b> (for identical conditions)	Within five seconds after detecting a 10 to 11 vol% gas for oxygen deficiency alarm
<b>Alarm indications</b>	Gas alarm: ALM LED lights up (red). Fault alarm: FAULT LED lights up (yellow)/information displayed.
<b>Transmission specifications<sup>*1</sup></b>	3-wire analog transmission 4–20 mA DC (common cable for power and signal [power, signal, common])
<b>Gas concentration display</b>	4-digit 7-segment LED
<b>Explosion-proof</b>	Flame-proof enclosure
<b>Explosion-proof class<sup>*2</sup></b>	Japan Ex Ex d IIC T6 X
	ATEX II 2G Ex db IIC T6 Gb
	IECEX Ex db IIC T6 Gb
<b>Protection level</b>	IP65 equivalent
<b>Operating temperature/ humidity range</b>	-10°C – +40°C (no sudden changes), up to 95 % RH (no condensation)
<b>Power source</b>	24 V DC ± 10%
<b>Power consumption</b>	Max. 1.1 W
<b>External dimensions</b>	Approx. 148 mm (W) × 208 mm (H) × 88 mm (D) (excluding projections)
<b>Weight</b>	Approx. 2.5 kg

<sup>\*1</sup> Specify HART communication specification requirements when ordering.

<sup>\*2</sup> Specify explosion-proof specification requirements when ordering.

## Explosion-proof in hydrogen/acetylene environments

Flame-proof enclosures enable use as an explosion-proof product in hydrogen/acetylene environments.

## Waterproof/Dust-proof

Protection rating equivalent to IP65. Suitable for use in harsh environments.

## Compatible with HART communications

The product sends digital signals across general analog 4 - 20 mA output lines to allow data exchange over a broad range.

## Equipped with self-diagnostic function

The device performs self-diagnostics after power supply starts.

In the event of an error, instead of displaying the gas concentration, the product will display a fault description (error code) pointing to a potential cause of the problem.

## Supports gas detection by aspiration

Connecting the SD-1 Series suction cap (with gas flow inlet/outlet) to the product sensor allows gas detection by aspiration.

\* Use for gas detection by aspiration requires a suction pump and aspirator unit (available separately), in addition to a power supply.