



RIKEN KEIKI

# TRANSMITTER TYPE GAS DETECTOR

Model SD-1RI (TYPE HS)

**HART**  
COMMUNICATION FOUNDATION



## Features

- Explosion class Exd IIC T6 Gb (CML 15ATEX1034 / IECEx (Pending))
- SIL2 IEC61508:2010 Parts 1-7
- 4-20mA DC output with HART
- IP65 ingress class
- Small, rugged, dust and weather proof construction
- One man maintenance by magnetic control key
- Self diagnosis by microprocessor

## Specifications

Model	SD-1RI (TYPE HS)
Detection principle	Non Dispersive Infrared Ray (NDIR)
Gas to be detected	Combustible gas
Concentration display	Seven-segment LED (four-digit)
Detection range	0-100 %LEL (0.5%LEL/digit)
Detection method	Diffusion type
Alarm set-point	25 %LEL
External output	4-20mADC with HART (load resistance : 300 Ω Max)
Initial clear time	Approx. 25 seconds
Alarm delay time (under the same conditions)	Approx. 30 seconds when exposed to gas concentration of 1.6 times alarm level
Gas alarm display	ALM lamp on (red)
Gas alarm pattern	Non latching (auto-reset)
Fault alarm/self diagnosis	System abnormalities/sensor abnormalities
Fault alarm display	FAULT lamp on (yellow)/detail display
Fault alarm pattern	Non latching (auto-reset)

Transmission cable	CVVS 1.25 mm <sup>2</sup> - 3-core or - 4-core CVVS 2.0 mm <sup>2</sup> - 3-core or - 4-core
Transmission distance	Max 1.25 km CVVS 1.25 mm <sup>2</sup> Max 2.0 km CVVS 2.0 mm <sup>2</sup>
Power supply	24 VDC (17 – 26.4 VDC)
Power consumption	Maximum 2 W
Cable connecting port	Flameproof cable gland
Operating temperatures	-20 - +60°C (at a constant condition)
Operating humidity	95% RH (Non-condensing)
Explosion-proof structure	Flame-proof enclosures
Explosion-proof class	Exd IIC T6 Gb
Explosion-proof certification number	CML 15ATEX1034 / IECEx (Pending)
Dimensions /Weight	Approx. 148 (W) x 161 (H) x 88 (D) mm (projection portions excluded) Approx. 2.0 kg

Specifications subject to change without notice

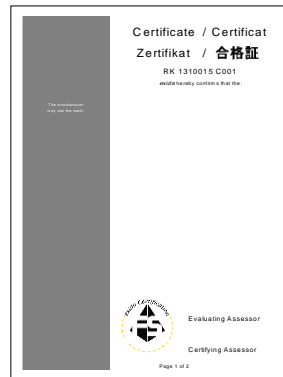
## Standard accessories

- Magnetic control key

## Optional accessories

- Calibration cap
- Sun shade cover (For pole stand)
- Sun shade cover (For wall)

## SIL CERTIFICATE



**RIKEN KEIKI Co., Ltd.**

2-7-6 Azusawa, Itabashi-ku, Tokyo 174-8744, Japan  
Phone : +81-3-3966-1113  
Telefax : +81-3-3558-9110  
E-mail : [intdept@rikenkeiki.co.jp](mailto:intdept@rikenkeiki.co.jp)  
Web site : <http://www.rikenkeiki.co.jp>

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Serm-Mit Tower 17F, 159 Sukhumvit 21  
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Tel: 02-260-2691 / Fax: 02-260-2690  
Email: [riken@taiyogases.th.com](mailto:riken@taiyogases.th.com)