



## LS5-R407-100g/y

High sensitivity NIDR Single Channel  
R407 refrigerant gas detector

---

### Product highlights

0-99.9 g/y leak rate range

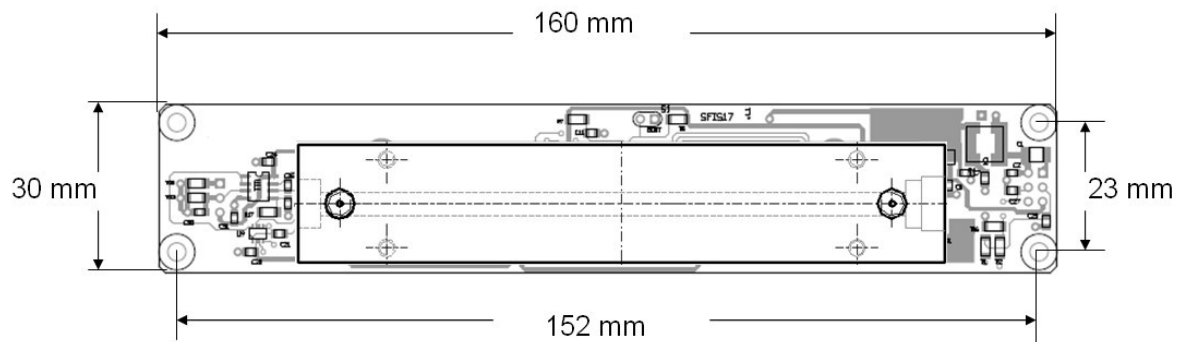
Single channel detector for highest sensitivity

Easy to integrate in OEM systems

### Applications

HVAC leak detection

## Mechanical drawing



## Operative Data

<b>Sensor type</b>	Single channel NDIR detector (LS-series)
<b>Detected gas</b>	R407 (Refrigerant gas)
<b>Measuring range</b>	0 ÷ 99.9 g/y
<b>Operating temperature range</b>	0 ÷ 55 °C (non-condensing)
<b>Storage temperature range</b>	-20 ÷ 85 °C
<b>Operating humidity range</b>	0 ÷ 90 % (non-condensing)
<b>Gas supply</b>	Flowing (nearly atmospheric pressure)
<b>Flow rate</b>	120 sccm (for a correct leak rate measure)
<b>Warm-up time</b>	< 60 s (start-up time) < 30 minutes (full specification)

## Mechanical & Electrical Specifications

<b>Dimension (L x W x H)</b>	160mm x 30mm x 40mm
<b>Weight</b>	155 g
<b>Gas connector</b>	Rapid fitting for 3mm o.d. tubing
<b>Voltage supply</b>	5V ± 10%
<b>Current consumption</b>	110mA (rms) – 220mA (peak)
<b>Signal Output</b>	0-3.3V
<b>Communication Interface</b>	UART (Baud-rate: 9600-115200) <sup>1</sup>

<sup>1</sup> ASCII Protocol described in the LS-series user manual. Default baud-rate is 9600.

## Measuring Specifications

Data rate	2/s
Response time T90 (0 – 90 %)	1 s
Resolution	0.1 g/y
Repeatability	± 0.3 g/y
Lower Detection Limit (LDL)	0.4 g/y
H2O vapor influence	None
Cross-sensitivity	Other refrigerant gases (contact factory)