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LFE OEM Thermal Conductivity Detector (TCD)
Application Questionnaire

Contact details

Company:	☐ System builder / Reseller
Name:	☐ End user
Dept.:	
Address:	
Country:	
E-mail:	Phone:
Website:	

Type of sample gas / application

☐ Biogas	☐ Metallurgy	☐ Synthesis gas	☐ Refinery
☐ Chemical	☐ Gas production	☐ Petrochemical	☐ Institute / University
other:			

Gas composition and characteristics

Please list all relevant gases - including N_2. Please be sure to list O_2 or air if it can also be present in the sample gas during measuring operation – especially together with H_2 or other flammable gases.

	Component	min. (vol.%)	normal (vol.%)	max. (vol.%)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

Desired TCD measuring range(s)

The OEM TCD can be configured with up to 3 independently configured, switchable ranges.

	Measured component	Begin of range	End of range	Units (vol.% or ppm)
Range 1		to		
Range 2		to		
Range 3		to		

Detector Models

Sample gas tubing

- ☐ PFA tubing (standard)
- ☐ Flexible stainless steel tubing
  - Max. allowed pressure: 4 bar (short periods only)
    (factory test pressure: 6 bar)
  - He-tightness of detector system: < 1e-6 mbar·l/sec
  - Pressure and tightness of analyzer gas paths tested based on EN 60079-2 (fail-safe containment)

Interface options (accessories)

Logic level converter

- ☐ Logic level to RS-232; isolated
- ☐ Logic level to Ethernet (Telnet protocol); isolated

Comments

NOTE 1: LFE's OEM-TCD utilizes the principle of thermal conductivity. This inherently non-selective principle is ideally suited to binary gas mixtures. For gases with multiple components it is necessary to consider the various gases comprising the sample, as well as dynamic fluctuations in their concentrations. These considerations can help to provide a basis for defining a reference gas and the appropriate method of interference correction.

NOTE 2: The customer must ensure that the sample gas is dry and free of particulates.

NOTE 3: The OEM-TCD is neither ex-proof nor intrinsically safe in terms of explosion protection.
The OEM-TCD should not be used for measuring ignitable gas mixtures.
The customer must ensure compliance with applicable regulations when using the OEM-TCD with inflammable or toxic gases or when installing within explosion endangered environments.