

# Application Data Sheet



# System Gas Chromatograph

# Methanol and Ethanol in LPG analysis system Nexis GC-2030DFC1 GC-2014DFC1

This method uses a new micro column switching technique (2D-GC) to determine methanol and ethanol in LPG. The chemical composition range of LPG is shown in the table. Compared to traditional valve switching techniques, this test method with a digital APC switch is much easier and simpler. Only one Aux-APC and three columns are applied in this GC system. Using a precolumn, all the components are separated into two main parts; the first part is hydrocarbons, the second part is methanol and ethanol. When APC2 is ON and APC1 is OFF, the hydrocarbons pass through col-2 (Alumina capillary column), are separated, and detected by FID-2. Immediately before the second part of the compounds are eluted out of the pre-column, turn on APC1 and shut off APC2. The methanol and ethanol pass through col-2, are separated, and detected by FID-2.

## **Analyzer Information**

#### System Configuration:

Three capillary column with two FID detectors

## Sample Information:

C1~C5 ,Methanol,Ethanol

### **Concentration Range:**

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	C1-C5	0.1ppm	90.0%
2	MeOH	0.1ppm	10.0%
3	EtOH	0.1ppm	10.0%

Detection limits may vary depending on the sample. Please contact us for more consultation.

#### **System Features**

•11 minutes analysis can be carried out for all compounds

· Single channel with three capillary columns by using FID detector





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