

# DF-745 NanoTrace Moisture Analyzer

## The Delta F NanoTrace Moisture Analyzer

- The DF-745 moisture analyzer is designed for applications which do not require the demanding detection limits of the model DF-750 moisture analyzer. A complimentary instrument to the DF-750 which has a Lower detection Limit (LDL) of 200ppt, the 745 offers an economic alternative with an LDL of 2ppb
- Utilizing the same Tuneable Diode Laser Absorption Spectroscopy (TDLAS) as the successful DF-750 inert gas moisture analyzer, the DF 745 offers a simple to use instrument for the measurement of trace levels of moisture in inert gases (N<sub>2</sub>, Ar, H<sub>2</sub>, He, O<sub>2</sub>)
- Applications include mobile carts for checking pipe-work integrity, troubleshooting, monitoring bulk gas supplies to LCD plants and fabs, gas plant control and QA.



For more information about Delta F sensor technology, ask for the Delta F Moisture Technology Brochure.

## Moisture System Performance

### Range

0 to 20 PPM  
Analog output scaleable down to 0-20 PPB

### Lowest Detection Level

2 PPB

### Resolution – Analytical (Sensitivity, Smallest Detectable Change)

0.5 PPB

### Resolution – Display

0.01 PPB

### Accuracy

Greater of  $\pm 3\%$  of Reading or  $\pm 1$  PPB

### Response Time (Typical)

10 minutes to reach 90% of an upward step challenge

### Upset Recovery Time

< 5 minutes from high PPB upset to within 10 PPB of previously stable reading

## Sample Requirements

*Sample Line Temperature:* Heat Trace to 140°F (60°C)

Limits: 50° to 176°F (10° to 80°C)

For best results, maintain sample line at 60° C

*Sample Flow:* 0.5 to 4lpm at 15 to 25 psig (2.03 to 2.72 BarA).

## Miscellaneous

*Dimensions:* 19" (48.3cm) W x 10.5" (26.7 cm) H x 22.5" (57.2 cm) D

*Weight:* 64 lbs. (29 kg.)

*Ambient Operating Temperature:* 50° F to 105° F (10° C to 40° C)

## Configuration and Installation

Delta F provides comprehensive assistance for a broad variety of application problems including measurements of semiconductor specialty gases. Depending on the model, Delta F analyzers can be configured to provide a wide choice of outputs for data collection and process control systems. Contact your Delta F representative for an Applications Data Sheet and pricing information.



Delta F Corporation  
4 Constitution Way  
Woburn, MA 01801-1087  
USA

Tel: (781) 935-4600  
Fax: (781) 938-0531

e-mail: [marketing@delta-f.com](mailto:marketing@delta-f.com)