

#### WORLDWIDE LEADER OF SOURCE SAMPLING EQUIPMENT

## **Method 2F 3D**

# FLOW MEASUREMENT XC-3D55 SYSTEM

The Method 2F 3D System is used for performing EPA Method 2F. The system uses a two-dimensional 3-hole prism-shaped pitot for accurately measuring flow rates for angular flow. This system provides a way for testers to improve the measurement of volumetric flow rate under cyclonic flow conditions found in some stacks and ducts. Multiple probes reduce the time for the flow Audits, therefore keeping the system as efficient as possible. Oversized sensor ports reduce plugging. The 1/4" pressure lines have quicker response and are less likely to leak than standard 1/8" lines.



Model XC-3655 SYSTEM

The best system for the determination of stack gas velocity and volumetric flow rate with three-dimensional probes.

### Features and Specifications

- The Apex Instruments XC-3D55 3-D Flow Measurement Console
  is used in conjunction with various pitots to determine velocity
  pressure, yaw angle and pitch angle of the flow velocity vector
  in a stack or duct according to U.S. EPA Method 2, 2F or 2G
- The XC-3D55 console easily interfaces with the UINC-3D-##
  umbilical/inclinometer assembly through a series of 1/4-inch
  quick connects, a 4-pin circular connector and a type-K
  thermocouple jack
- Readings for stack temperature, velocity pressure, pitch
  pressure and yaw angle are displayed respectively through a
  display, process meters, and a totalizer. The null angle is
  displayed through a Magnehelic.

- Stack temperature: type-K thermocouple
- **Velocity pressure:** (P1-P2) range ±5 inH2O
- Yaw null: bidirectional (P2-P3) range ±5 inH2O 5 Bi
- Pitch range: bidirectional (P4-P5) range ±5 inH2O 5 Bi
- Yaw angle range: 180° (static >360°). +/-.01°
- Breaker switch: magnetic-type circuit breaker rocker switch







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#### Components

XC-3D55: Digital 3-D flow measurement console, digital displays for temperature, velocity pressure, pitch pressure, yaw angle

**3DPT2:** 3-D pitot, 5-hole prism-shaped tip with 2-foot sheath supplied with five 1/8-inch to 1/4-inch tube unions

**32PTX-\_:** Probe extension, 2-inch diameter sheath, split collar clamp with 1-inch inner diameter, specify length

**PF-46XT32S:** Port flange with extension, flange fits, 4- and 6-inch ports

**32M/32B-B:** 2-inch bored brass bushing, 2-inch MNPT with 2.035-inch bore

PG-32S: 2-inch packing gland, stainless steel body and nut, 2-inch MNPT, PTFE ferrule included

PT-CAL-W2F\_\_: 2-inch packing gland, stainless steel body and nut, 2-inch MNPT, PTFE ferrule included

**UINC-3D-\_:** 3-D inclinameter pad and umbilical cord, specify umbilical cord length in feet

U-PTX-\_\_\_: 2-inch diameter pitot sheath extension

AK-M2: Audit kit