APEX INSTRUMENTS

WORLDWIDE LEADER OF SOURCE SAMPLING EQUIPMENT

▷ # XC-53

DIGITAL ISOKINETIC SOURCE SAMPLING CONSOLE

Simple. Easy. Cost-Effective.

The **XC-53 Sampling Console** from Apex Instruments is designed as a cost-effective entry level metering console for Isokinetic Sampling.

Included is the Peak 32 Microcontroller Module allowing the console to utilize a backlit, sunlight readable screen, an easy-to-use 4 button keypad, and sensors for measuring temperatures and pressures. The Peak 32 MCM also allows for user-adjustable dampening for stable display of the ΔP and ΔH values. A USB interface is used for sensor calibration and firmware updates.

The console uses an internal diaphragm pump, reducing the weight of the console and pump and can be easily adapted to all isokinetic methods including (OTM)-45 for PFAS.
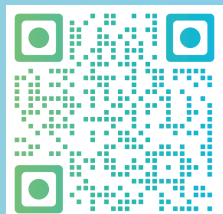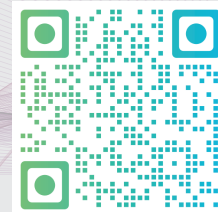
Model XC-53

The XC-53 will get the job done, no matter what.

Features

- Rugged and lightweight roto-molded linear low-density polyethylene (LLDPE/LMDE) case with 3 heavy-duty handles
- Digital display with backlit LCD screen
- SK-25 precision dry gas meter
- Digital PID temperature controllers for probe and oven
- Booster pump compatibility for additional flow
- Peak 32 MCM electronics package
- Digital timer and real-time clock

- Pressure damping (average over time)
- Membrane button pad to fully access console features
- Digital temperature display with 5 type-K thermocouple inputs plus DGM and internal
- Mounted case allows for easy service access
- Peak 32 microcontroller module (MCM)

▷ XC-53

ISOKINETIC SOURCE SAMPLING CONSOLE
METERING CONSOLE

2. Oven Temp. Controller

3. Multi-Function Display

1. Probe Temp. Controller

4. Peak 32 MCM Electronics package

5. Display User Buttons

6. Mechanical Dry Gas Meter Display

8. Quick Connects

7. Flow Control Valves

Specifications

Dry Gas Meter: Model SK25EX, volumetric gas displacement measurement, numeric index with leak check wheel, Qmax 41 LPM at 150 Pa., Qmin 0.26 LPM, index range 9999 cubic meters, resolution 0.2 Liter, cyclic volume 0.7 Liters, type-K thermocouple for exit temperature.

Display: 4x20 Character Backlit Transflective Liquid Crystal Display, viewing area 74 mm x 45 mm, operating temperature -20 to 70°C.

Internal Sample Pump KDF Dual Head Diaphragm, 70 lpm free flow, 21 lpm @ -50kPa, max vacuum -85 kPa, 24 VDC Brushless Motor

Flowmeter Precision stainless steel venturi orifice.

Temperature Measurement: Cold junction compensated type K Thermocouple-to-Digital converter °C/°F selectable, -200°C to 1372°C range. (-328°F to 2502°F). 6 channel rotary
switch, up to 5 addition Type-K thermocouple inputs, standard size jacks.

Probe and Oven Temp. Control: Fuji PXR3 Compact, 1/32 DIN self-tuning PID temperature controller, independent 25 amp solid state relays. Type-K thermocouple jack for input.

Digital Pressure Transducers:
ΔP Low +/- 1.0" (+/-249 Pa) range bi-directional with 0.001" (0.1 Pa) resolution
ΔP High +/- 10.0" (+/-2491 Pa) range bi-directional with 0.01" (1 Pa) resolution
ΔH 5.0" (1245 Pa) range with 0.01" (1 Pa) resolution
(ΔP automatically selects appropriate transducer for current flow)

Vacuum Gauge: Bourdon tube, Dual Scale, 0 to -30" Hg, 0 to -100kPa

Umbilical Connection: Multi-conductor circular electrical connector. Instrumental grade stainless steel quick-connect fittings:
- Sample inlet: 1/2-inch female
- Pitot connections: 1/4-inch female

Standard size type-K thermocouple connectors:
- Aux, Stack, Probe, Oven, Exit

Power: Supply 120VAC/60 Hz 15 amps max. or 240VAC 50 Hz 10 amps max., IEC C-14 Inlet.

Dimensions/Weight: H17 x W17 x D12 inches (43 x 43 x 30.5 cm), 40 lbs (18 kg)

XC-53
LEGEND

XC-53 ☐☐ - ☐☐☐☐☐☐

Pump Options:
BLANK = Internal Pump Only
      (Standard)
P = Fittings for Additional
   Pump Installed (Female/Female)
  XP = No Internal Pump (Male and Female)

Power Output Option:

A = 5 Pin Amphenol
   (Size 14S Shell - Male/97 Series)
B = 5 Pin Amphenol
   (Size 14 Shell - Bayonet Style/PT Series)
C = 5 Pin Amphenol
   (Size 16S Shell - Male/97 Series)

Gas Meter Display Options:
BLANK = Mechanical
D = Digital

Temperature Controller Option:
BLANK = English
M = Metric

Analyzer Output Option:
BLANK = None
A = 1/4" Valved Female
   Quick Connect

Pitot Quick Connects:
BLANK = 1/4" Instrumental
QS6 = 3/8" Instrumental

Voltage:
BLANK = 120V
V = 240V