

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

1. Probe Temp. Controller 2. Oven Temp. Controller

3. Multi-Function Display

package



8. Quick Connects

7. Flow Control Valves

6. Mechanical Dry Gas **Meter Display**

4. Peak 32 MCM Electronics

5. Display User Buttons

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:

 $\Delta P Low +/-1.0" (+/-249 Pa)$ 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)