XD-502

Digital Isokinetic Source Sampling Console

Lighter. Smaller. Easier.

The new **XD-502 Digital Source Sampling Console** is the first Method 5 console being offered in our new compact light weight design.

The console uses an internal diaphragm pump, reducing the weight of the console and pump portion of the train to 37lbs, from 90 lbs (more than 50% reduction).

Additionally, we're including our new multi-function sunlight-readable transflective display. With quick and easy menu navigation to access and control sampling operations such as auditing and calibrating, this digital console is the best choice for a portable and easy-to-use alternative to the traditional Method 5 Console.

Lighten the load on your back and take a step into the future with this lightweight digitally enhanced isokinetic sampling console.

Model XD-502

Features and Benefits:

- Rugged lightweight case with three heavy-duty stainless-steel handles
- Sunlight readable digital display for easy calibrations and audits
- USB or wifi data export - streaming or batch downloads using our intuitive console software
- Indoor or outdoor readable easy-to-use display
- SK-25 precision dry gas meter with digital optical encoder

- Digital vacuum gauge
- Digital temperature display with six type-K inputs plus DGM and internal
- All stainless-steel fittings and control valves (brass fittings and valves available)
- Digital PID temperature controllers for probe and oven.
- Digital elapsed timer (hr:min:sec)
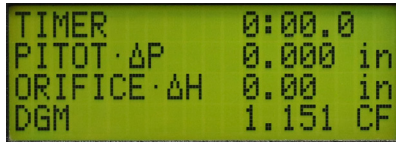- Easy access for service (mounted in case)

XD-502 Display

Our brand new display is programmed specifically to perform isokinetic sampling functions. With easy-to-navigate menus and quick response times, this display will allow stack testers to:

- Set and manage traverse points data collection
- Configure saving of periodic data points
- Set markers for stack testing events
- Perform leak checks before, during, and after collection
- Stores all data collection to be exported at a later time
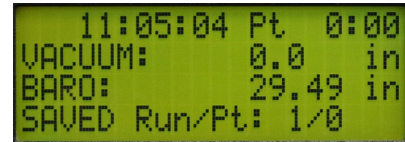

Display and function keys

Main Screen Navigation
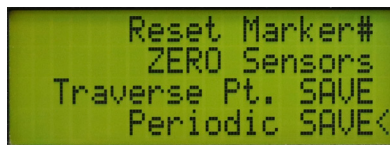

Main Screen

Temperature Screen

Test Information Screen

- Displays eight temperature readouts simultaneousle for faster data recording and measurement
- Traverse point tracking to help you stay on track during your test
- Timer and differential pressure display screen for easy maintentance of isokentics
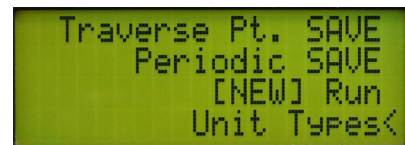
Operation Options Menu

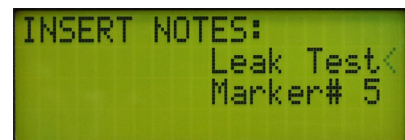Dampening Menu Screen

Test Options Screen

Additional Menu Screen

- Adjustable ΔP and ΔH damping and damping bands to reduce errors caused by source fluctuations
- Set your traverse times and periodic data captures based on your specific sampling needs
- Easily switch between measurement unit types

Leak Test and Notes Menu

- Pause the test anytime and perform intermediate leak test independently of overall test data
- Set markers and notes for data export later to help you manage unexpected stack test events

Leak Test and Marker Menu Screen

XD-502 Software (optional)

Our XD-502 software was specifically designed to complement and enhance the productivity of isokinetic stack sampling. While it is helpful in performing a sampling test it is not necessary for sampling operations. Using this intuitive and reliable software, the stack tester will be able to:

- Export the data collection to an easily readable Excel file
- Perform all necessary stack sampling functions
- Observe all stack testing measurements in one place
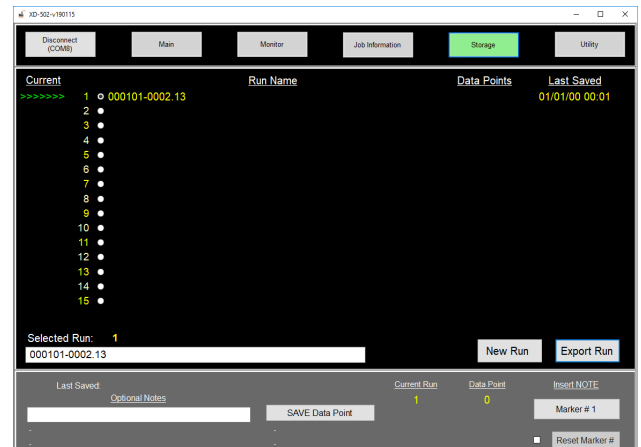- Tune calibrations as needed according to regulations

Main Operation Screen

Data Export Capabilities

- Data points are collected periodically or manually
- Data is stored on the console to be exported at any time
- Export includes test run averages, traverse points, and raw data all neatly organized on a CVS file
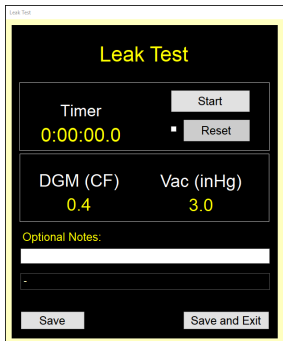

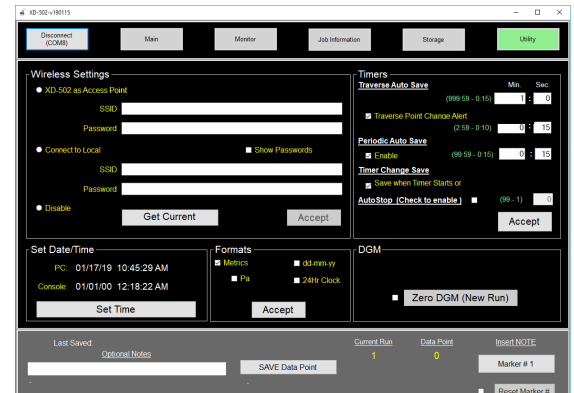Test Run and Data Export File

Test Run and Data Export Screen
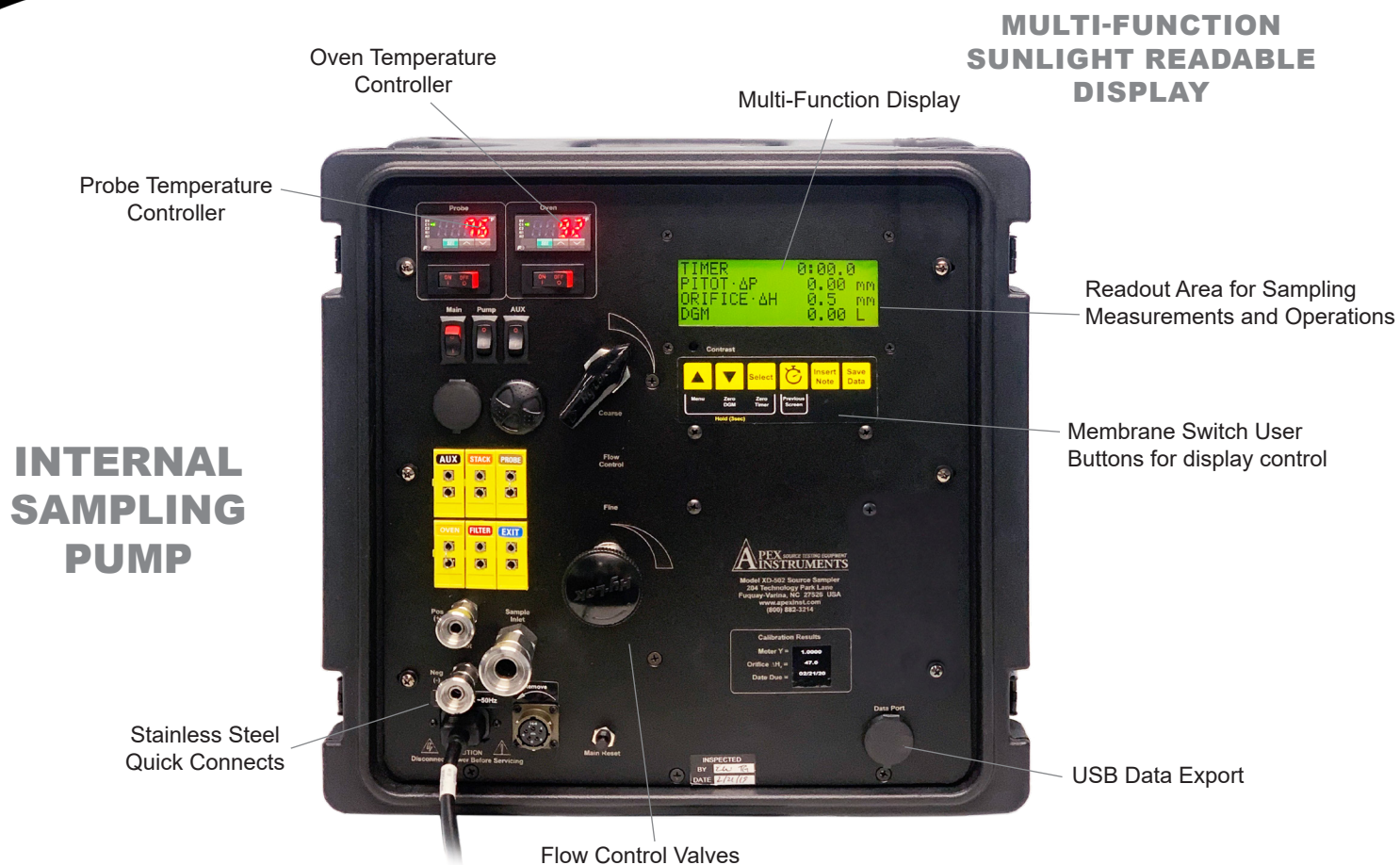
Sampling Operations

Leak Test Screen

- Perform leak check
- Thermocouple measurement A
- Dry gas meter zeroing
- Sensor zeroing
- ΔP and ΔH damping and band tuning
- Vacuum zeroing
- Additional console service features

Utilities Screen

MULTI-FUNCTION SUNLIGHT READABLE DISPLAY

Oven Temperature Controller

Probe Temperature Controller

Multi-Function Display

Readout Area for Sampling Measurements and Operations

Membrane Switch User Buttons for display control

INTERNAL SAMPLING PUMP

Stainless Steel Quick Connects

USB Data Export

Flow Control Valves

Specifications:

Display: 4x20 character back-lit transflective liquid crystal display, including membrane switch for navigation of menu and sampling operations

Gas meter: Model SK25EX, with 100 CPR quadrature encoder, 0.7L/rev., 41 lpm max

Flow indicator: Precision machined stainless steel orifice with pressure transducer, Range 0 - 5" H_2O (1245 Pa) resolution of 0.01" (1 Pa)

Temperature measurement:
8 channel individually isolated type-K thermocouple meter, °C/°F selectable, -200°C to 1372°C range. (-328°F to 2502°F)

Probe temperature control: Compact, 1/32 DIN auto-tuning indicating temperature controller with separate 25-amp solid-state relay, type-K jack for input

Digital pressure transducers:
ΔP +/- 1.0" (+/-249 Pa) and +/- 10.0" (+/-2491 Pa) range bi-directional with 0.001" (1 Pa) resolution
ΔH +/-5.0" (+/-1245 Pa) range bi-directional with 0.01" (1 Pa) Resolution
(ΔP automatically selects appropriate transducer for current flow)

Data export: USB or wifi batch downloads using included software

Alarm buzzer: 12V

Vacuum gauge: Digital scale, 0 to 30 inHg or 0 to 100kPa

Umbilical connection:
Electrical: 5-pin conductor circular connector with ground
Sample enlet: 1/2" stainless steel instrumental quick-connect (alt. sizes available)
Pitot connections: 1/4" stainless steel instrumental quick-connects
Thermocouples: AUX, STACK, PROBE, OVEN, FILTER, EXIT

Power: Supply 120V, 150W, 24V/6.3A, IEC C-14 Inlet

Dimensions: H17" x W17" x D12" (43 cm x 43 cm x 30.5 cm)

Weight: 40 lbs (18 kg)

Website: www.apexinst.com
Contact: info@apexinst.com
919-557-7300 or 800-822-3214

Apex Instruments, Inc.
204 Technology Park Lane
Fuquay-Varina, NC 27526, USA
File Name: XD-502 - 2nd Gen - 4 Page Brochure