ASC-10 Automated Sample Console
FTIR Sampling Made Easy

The Thermo Scientific™ Automated Sample Console (ASC-10™) is a gas sampling system that will heat and multiplex sample, zero gas and calibration gas streams automatically.

The ASC-10 system can handle hot and wet samples while coupling to nitrogen and calibration streams using a single sampling pump and particulate filter. This system is ideal for integration with Thermo Scientific™ MAX-iR™ gas analyzers.

The ASC-10 system allows for heated sample flows up to 10 L/min and has three heated valves for automated switching between the three sample modes. It has three independent heated zones: the manifold oven, sample pump, and heated transfer line. The sample console uses an industry standard T-handle particulate filter for ease of filter replacement.

**ASC-10 system features**
- Gas flows controlled manually or by software
- Panel buttons set sample stream and pump
- Welded gas manifold to prevent leaks
- Automated analyte spiking and system checks
- Compliant with US EPA Method 320
- High temperature pressure-actuated valves
- 10 L/min heated diaphragm pump (oil free)
- Heated oven, pump and transfer line
- T-handle particulate filter
- 19½ inch rack mounted design
- Analog input for O2 analyzer

**Automation features**
- Ethernet or serial programmable logic controller (PLC)
- Automated control software

**Applications**
- FTIR source testing
- Continuous emissions testing
- Engine dyno testing
- Process analytical testing
- Ambient air testing
- Sealed housing for evaporative determination (SHED) testing
Operational systems
- Watlow™ heater controllers
- Sample console oven
  - Heated particulate filter
  - Heated sample valves
  - Radiant heater
- Diaphragm sampling pump.
- ¼” Swagelok™ plumbing connections
- Ethernet communication to PC

System software
Thermo Scientific™ MAX-Acquisition™ Software allows the user to quickly switch between sample, zero, direct calibration checks, system checks, and analyte spiking with the click of a button. The user can also configure automated Workflows to control unattended operation, monitor temperatures of the heated zones, and set mass flow controller (MFC) flow rates.

Facilities requirements
- Ultra-high purity (UHP) nitrogen for zero and MAX-iR analyzer purge, 20 psig
- Clean dry air (CDA) or N2 for valve actuation, 80 psig
- Power: 120VAC, 50/60Hz, 5.4A; 208-240VAC, 50/60Hz, 2.8A

Dimensions
- 19 1/2” (W) x 15 3/4” (H) x 23 1/4” (D) [49 1/2 cm x 40 cm x 59 cm]
- 95 lbs (43 kg)