SSCM

Sampling System Control Module

Self-contained sampling control for use with Protea FTIR gas analysers

The control of the gas sample in any analysis system is critical. From heated sample lines and probes to pump control, the management of the system is important to stop any damage to analytical hardware. For this reason, Protea supplies the Sampling System Control Module (SSCM) with our range of FTIR, TDLAS and Mass Spectrometer analyser systems.

The SSCM contains PLC management of heated sample system alarms ensuring no condensed sample enters the analyser. With built in sampling pump, the sampling of gas can be controlled by the analyser. Multiple span gas valves are integrated into the unit, so instrumental checks can be automated.

The SSCM connects to Protea's PAS-Pro software for running fixed application systems. PAS-Pro collects and analyses FTIR data from atmosFIR analysers, but with SSCM integration PAS-Pro also controls the entire measurement system. This makes the use of the SSCM ideal for CEM systems. Protea can re-configure the SSCM for various applications, making the complete system provided automated to match the needs of testing standards. For example, by integrating the SSCM with Protea's Heated Stream Selection Module (HSSM), up to 12 measurement streams can be monitored by the 1 analyser.

Combines with atmosFIR FTIR gas analysers to form complete Continuous Emissions Monitoring (CEM) system

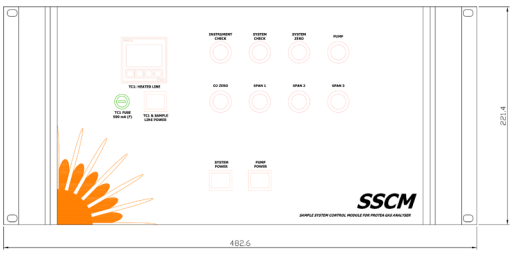
Easy to integrate – 19" rack mounted

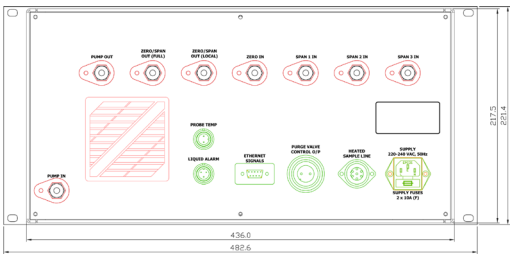
Built-in PLC control

SSCM configurable on application

Specific Applications for SSCM:

- CEMs
- 2 stream measurement control. For example, abatement system Inlet and Outlet
- Fire Testing procedure automation
- Muti-stream system control – up to 12 measurement streams to 1 analyser via integration with Protea's Heated Stream Selection Modules (HSSM)





Hardware Specifications

PLC control	Siemens S7 PLC with I/O modules for application
Pump	Anti-vibration mounted continuous duty diaphragm pump, with PTFE coated heads suitable for corrosive gases Operating current: 220mA (230VAC)
Temperature Control	Up to 4 separate Temperature Control circuits, each with separate alarms
Span Valves	Up to 5 separate span gas valves, for automated instrument checks
Digital I/O	Standard: Up to 4 separate digital I/O, for probe alarms, sample valve and probe back-purge valve control Additional: 12 extra digital outputs, to integrate with multi-stream sampling control
Communications	RS485; Ethernet (optional)
Dimensions	46cm x 22cm x 5U (19" rack mountable)
Voltage	110VAC/230VAC
Power	Dependent on system options Heated Line approx. 90W/m