

SampleSmart XP/ASP

Sample Draw Gas Detection System

Sample Draw System with Pressure and Flow Ability

The **SampleSmart XP/ASP** sample draw system is engineered to monitor gas atmospheres from extreme conditions with either temperature or pressure challenges. A powerful air aspirator can pull a sample from up to 300 feet away from remote or hostile locations where a gas detector can't be directly or easily installed. The standard **SampleSmart XP/ASP** unit integrates **SenSmart** gas detector(s), flow meter with adjustable flow control valve, that adjusts for variations in gas supply pressures and flows into a compact package to be used in Class 1 Div 1 hazardous locations. Accessories may be added to condition sample gases drawn from difficult environments containing dust, moisture, corrosives etc. Temperature controlled and compensated gas sensors and industrial rated components ensure reliable operation and rapid response.

In the Heart of SampleSmart XP/ASP ---- SenSmart 6000 Gas Detector

The **SampleSmart** sample draw system utilizes the state-of-the-art **SenSmart 6000**, a single/dual channel gas detector with vivid full-color graphic display with exceptional visibility. The display shows gas values, user tag names, engineering units, bar-graphs and trends. Alarm conditions flash color alerts onto the entire screen to warn operators of high concentrations. The **SenSmart 6000** supports Smart Sensors for toxic and combustible gases as well as volatile organics and inert gases such as CO₂. A menu-driven operator interface eliminates analog potentiometers and allows setup and calibration without hazardous area declassification. An integrated Run/Cal valve and user prompted calibration procedure make routine maintenance and field 'bump tests' quick and easy. The **SenSmart 6000** incorporates an industry standard RJ-45 Ethernet interface with integrated web server that allows users to monitor the system through standard Ethernet network

Applications:----

The **SampleSmart XP/ASP** is ideal for sampling toxic or combustible gases in:

- Air conditioning intake / exhaust
- Boiler burners / ducting
- Cabinets / storeroom with limited access
- Plenums / ducts
- Sumps / enclosed areas
- Ventilation / airflow
- Pipelines



FEATURES HIGHLIGHT:

- Single / Dual channels support sensors for both toxic and combustible gas
- Sample lines (Stainless Steel or Teflon) up to 300 ft. in less than 3 minutes
- Engineered for using in Class 1 Div. 1 locations
- Easy magnetic wand setup in hazardous area
- Easy flow regulating with built-in flow meter and valve
- Loss-of-flow detected and indicated on readout
- High visibility vivid QVGA color display
- Alarm flashes user selected colors onto display
- Standard RJ-45 Ethernet interface with built-in web server and Modbus TCP
- Standard 4x alarm relays and dual serial MODBUS master/slave RS-485 interface
- **SenSmart 6000** auto-configuration with Smart Sensor
- Dedicated calibration port for fast and easy maintenance
- Options for sample conditioning with filters for dust and/or moistures
- Customized for special conditions available

SPECIFICATIONS

Power Supply	24VDC at < 10 watts
Display	High visibility color QVGA LCD displays engineering units, alarm levels and trend data
Gas Sensor Channel One	Smart Sensors supported are EC for toxic / O ₂ , Catalytic Bead or IR for combustibles, PID for VOC's.
Gas Sensor Channel Two	Supports Smart Sensor EC for toxic or O ₂ , 4~20mA Devices
Signal Output	<p>Single or dual 3-wire 4-20mA current source. Max loop R is 750 ohms with nominal 24VDC power supply.</p> <p>10/100 Ethernet with MODBUS/TCP and web server allows remote view / configuration of gas detector values and settings</p> <p>5 Bright LED's including red / green flow status indicator. Shows GREEN if flow OK, RED if flow blocked.</p> <p>Four standard form C Relays rated 5A @ 30VDC / 240VAC</p> <p>Dual RS-485 2-wire MODBUS® interface wiring junction box with power-on indicator and easy-connect wiring terminals.</p> <p>3/4" NPT female connections</p>
Instrument Pressure to Aspirator	5-60 PSI
Instrument Air Consumption	<0.2 SCFM
Flow Error	LCD indication with 4~20mA error signal SPDT relay output
Housing	Aluminum housing with epoxy paint (#316 stainless Steel optional)
Dimensions	20" x 12" With Stainless steel plate, 24" x 12"
Weight	12 pounds, With Stainless Steel Mounting Plate, 18 Pounds
Inlet/Outlet Tubing	1/4" compression, stainless steel
Warranty	1 year limited warranty

Note 1: Please contact R. C. Systems to fill sample conditioning system questionnaire for better system performance.

Note 2: Reactive gases not suitable for Class 1 Div. 1

Note 3: Contact R.C. Systems for detection range of the target gas

Note 4: AC powered system is also available

Note 5: Web server requires password to change settings

Order Information

SampleSmart XP/ GP H/F/A/B

"H"	1 = 20 " x12" stainless Steel Plate 2 = 24" x 24" Poly Enclosure 3 = 24" x 24" Stainless Steel Enclosure
"F"	0 = None 1 = Particulate filter 2 = Coalescing Filter
"A"	Channel 1 Gas Type (See below Table)
"B"	Channel 2 Gas Type

Gas Type

00	None	
01	Arsine	32°F to 104°F
02	Benzene	32°F to 131°F
03	Carbon Dioxide	32°F to 158°F
04	Carbon Monoxide	32°F to 122°F
05	Ethylene Oxide	32°F to 122°F
06	Hydrogen	32°F to 122°F
07	Hydrogen Sulfide	32°F to 122°F
08	Nitric Oxide	32°F to 122°F
09	Nitrogen Dioxide	32°F to 122°F
10	Sulfur Dioxide	32°F to 122°F
11	Oxygen	32°F to 131°F
12	Butane	32°F to 158°F
13	Ethane	32°F to 158°F
14	Ethanol	32°F to 158°F
15	Hexane	32°F to 158°F
16	Methane	32°F to 158°F
17	Pentane	32°F to 158°F
18	Propane	32°F to 158°F
19	Propylene	32°F to 158°F
20	Contact RC Systems for Unlisted Gas	32°F to 131°F

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