

# LDGSS



## ULTRA HIGH PURITY GAS STREAM SELECTOR



The LDGSS stream selector system brings to the gas industry a reliable and compact solution to provide clean gas to any process GC and online process analyzers. It's compact design, having welded internal flow path manifolds with all stainless-steel piping allows to keep the contamination level to minimum. Combining a choice between the pneumatic stainless-steel purged diaphragm valves or the 3 ways electric peek/stainless-steel solenoid valve, the LDGSS can be configured specifically for your application. By having its fast loops sample bypass purge flowmeters & valves mounted on its front panel for each stream, the system offers the standard fast purging system required by the industry to ensure quick purging and excellent response time for the analytical equipment. Both of the valve configurations offer a sample bypass for the unselected stream that allow each stream to be purged permanently. All unselected streams can be then always ready for analysis without having extra delay required for purging it. The selection valves used are designed to avoid any kind of outboard or inboard leakage offering ultra high purity performances. Depending of the gas stream composition and the application, different type of material or coating can be used to be sure to offers the best compatibility with materials and to keep the best response time possible for the analytical instruments. The LDGSS can be configured for a range of 2-10 streams inside the same compact 3U rackmount enclosure. Each stream inlet has its particle filter frit type to avoid any type of particles to damage the internal valves and flow path. Different options are available and well describes in the specifications.

### FEATURES:

- Compact 3U rackmount design reducing project costs.
- Remote & local stream selection
- Leak proof, tested and certified to sub ppb
- Air diffusion resistant design (no inboard/outboard leakage)
- Choice of pneumatic diaphragm valve or electric solenoid valve
- All made of stainless-steel
- No stream cross contamination
- Quick purging time based on the fast loop manifold and the bypass valve configuration
- Internal purge channel in the diaphragm valve design
- Easy to operate
- Can be easily integrated to any type of process G.C. or inline process analyzers
- No maintenance required before 5 years considering 24/7

### APPLICATIONS & END USER'S:

- Industrial gases
- Air separation industries
- Semiconductor
- Petrochemical
- Environment
- Energy
- Food and beverage
- Laboratory GC's installation
- System's Integrators
- Glove box

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## SPECIFICATIONS:

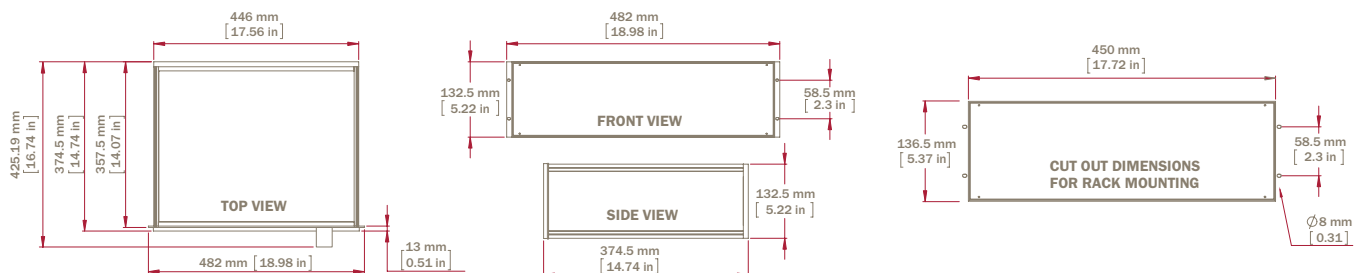
<b>NUMBER OF INLETS</b>	2 to 10 streams configurable
<b>STANDARD FEATURES</b>	<p>Front mounted stream fast loop bypass valves &amp; flowmeters</p> <p>Dry contacts that remotely give status of selected stream</p> <p>Local or Remote control via 12VDC or 24VDC supply</p> <p>Front mounted rotary switch selector for local control</p> <p>Electrical or pneumatic valves available</p> <p>Particle filter frit type 10 microns is mounted on each stream inlet</p> <p>Choice between purged pneumatic valve or 3 ways electric sample bypass valve</p>
<b>OPTIONS</b>	<p>BRP : Sample outlet back pressure regulator to maintain a constant ultra high purity sample outlet pressure control</p> <p>VPB : Valve purged box for toxic and/or hazardous gases</p> <p>PG : Purging gas inlet flowmeter/valve mounted on front panel to adjust the diaphragm valve purge flowrate</p> <p>PR : Stream inlet inline pressure regulator for reducing and adjusting the stream pressure below the maximum operating pressure</p> <p>C : Coating for aggressive or absorbent gases</p> <p>MBP : Metal bellow pump when sample pressure is below 2-3 psig</p> <p>O2 : Oxygen clean certified</p> <p>DBB : Double block and bleed configuration</p>
<b>SAMPLE BYPASS FRONT MOUNTED VALVES/FLOWMETERS FLOW RANGE (FAST LOOPS):</b>	0 to 500 ml/min in reference to air installed by default (larger ranges possible for faster purge)
<b>GAS INLET &amp; OUTLET CONNECTIONS</b>	1/16" - 1/8" - 1/4" Stainless Steel Compression type Swagelok compatible. 1/8" - 1/4" Stainless Steel High Purity face seal (VCR) type
<b>PURGED GAS VENT CONNECTIONS</b>	1/8" - 1/4" Stainless Steel Compression Type Swagelok compatible 1/8" - 1/4" Stainless Steel High Purity face seal (VCR) type
<b>SUPPLY</b>	85VAC to 240VAC 50/60Hz
<b>POWER CONSUMPTION</b>	Max 15 watts
<b>MAXIMUM OPERATING PRESSURE</b>	30 PSIG (206Kpa) with 3 ways valve version 300 PSIG (2068Kpa) with stainless steel diaphragm valve version <sup>1</sup>
<b>MINIMUM OPERATING PRESSURE</b>	3 PSIG (20Kpa) (lowest pressure and vacuum mode applications can be achieved by adding the optional metal bellow pump)
<b>NOMINAL WORKING PRESSURE</b>	20 PSIG (138Kpag)
<b>REMOTE CONTROL VOLTAGE INPUT</b>	12 VDC or 24VDC at 200mA maximum
<b>WEIGHT</b>	Max 25 lbs (11Kg)

<sup>1</sup> Front mounted stream bypass valves are not available above 100PSIG

## ORDERING INFORMATION:

LDGSS	-XXX	-X	-X/X	-XXX	-X	-XXX
	<b>Operating Voltage</b> 120: 120 Volts 220: 220 Volts	<b>Number of Inlets</b> 2 to 10 : 2 to 10 streams	<b>Gas Inlets Connections Size</b> 1/16 : 1/16 inches 1/8 : 1/8 inches 1/4 : 1/4 inches	<b>Gas Inlets Type</b> VCR : face seal type SWG : compression type	<b>Valve model</b> P : Pneumatic E : Electrical	<b>Options</b> BPR      C VPB      MBP PG        O2 PR        DBB

## DIMENSIONS:



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