

# LDGDS



## GAS DILUTION SYSTEM



The LDGDS is a user's friendly gas dilution system that offers all the flexibility to generate manually or automatically the desired gas mixtures. The Windows user's interface gives the ability to control and monitor the mixtures, flows, pressures and the concentrations. The system can store multiple gas cylinders mixture and it becomes easy to select the right cylinder to generate different blends. It reduces the cost of having specific standard for each blend needed. The dilution system is designed with a manual or automatic pressure controller installed on the zero gas line, on the span gas line and to regulate the outlet blended gas line pressure. This way, it improves the stability and the regularity of the flow controls. Each flow table uses a 10 points calibration curve to characterize the linearity of each flow controller.

To ensure ultra high purity zero gas reference to generate ppb blends, an optional integrated heated gas purifier can be mounted on the zero gas flow path.

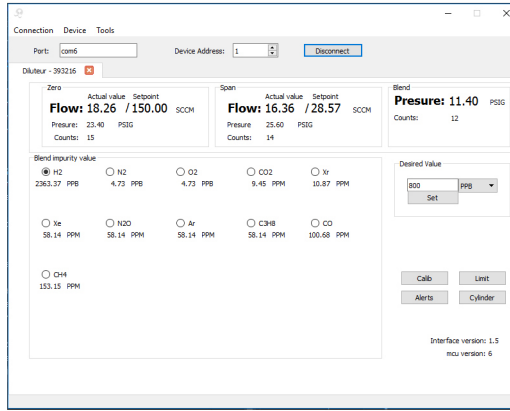
### FEATURES:

- Automatic calculation of dilution concentrations
- Manual or automatic pressure controller
- Broad range of dilution ratios (up to 1000 to 1)
- Windows user's interface through serial communication
- Multiple gas standard libraries available
- Alarms management
- 3U cabinet
- Integrated heated gas purifier to generate ultra high purity zero gas reference (optional)

### APPLICATIONS:

- Multi-point calibration of gas analyzers
- Gas mixture
- Calibration standard of ppb/ppt concentrations for the electronic gas grade instrument.  
(The integrated heated gas purifier is required)

## SOFTWARE INTERFACE:



## SPECIFICATIONS:

<b>PRESSURE CONTROLLERS</b>	Manual pressure regulator or Electronic pressure regulator	
<b>DILUTION RATIOS</b>	0 – 10 0 – 100	0 – 1000 other ratios possible on request
<b>REPEATABILITY</b>	< 1%	
<b>ACCURACY</b>	Better than $\pm 1\%$	
<b>OPTIONS</b>	Integrated heated gas purifier for Zero gas reference	
<b>GAS CONNECTIONS</b>	Inlets/Outlets: 1/8" compression fittings (Swagelok type) 1/4" compression fittings (Swagelok type)	1/8" VCR fittings (Swagelok type) 1/4" VCR fittings (Swagelok type) Vents: 1/8" compression fitting (Swagelok type)
<b>MAX OPERATING PRESSURE</b>	100 PSIG (6.89 Bar)	
<b>MIN OPERATING PRESSURE</b>	10 PSIG (0.7 Bar)	
<b>OPERATING TEMPERATURE</b>	10 °C to 50 °C	
<b>SUPPLY</b>	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
<b>POWER CONSUMPTION</b>	Maximum 10 watts Maximum 60 watts with optional integrated heated gas purifier	
<b>DRIFT</b>	< $\pm 1\%$ over 24 hours	
<b>WEIGHT</b>	16 lbs (13 kg)	

## ORDERING INFORMATION:

LDGDS	-X	-X	-X	-XXXX	-XXX	-X
	Zero Gas type: <b>A:</b> Argon <b>H:</b> Helium <b>N2:</b> Nitrogen (other possible on request)	Span Gas type: <b>A:</b> Argon <b>H:</b> Helium <b>N2:</b> Nitrogen (other possible on request)	Ratio: <b>10:</b> 10 to 1 <b>100:</b> 100 to 1 <b>1000:</b> 1000 to 1 (other possible on request)	Inlet/Outlets Fittings <b>2SWG:</b> 1/8" Swagelok <b>4SWG:</b> 1/4" Swagelok <b>2VCR:</b> 1/8" VCR <b>4VCR:</b> 1/4" VCR	Operating Voltage: <b>120:</b> 120 volts <b>220:</b> 220 volts	<b>C:</b> Integrated heated gas purifier for zero reference

## DIMENSIONS:

