

LDGDSA



AUTOMATIC GAS DILUTION SYSTEM



The LDGDSA is a user's friendly gas dilution system that offers all the flexibility to generate automatically the desired gas mixtures. The Windows user's interface gives the ability to control and monitor the mixtures, flows, pressures and the concentrations remotely. The system can store multiple gas cylinder mixtures 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 an automatic electronic 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 (compact-LDP1000 series) can be mounted on the zero-gas flow path. Our flow path design is also configured with zero dead volume and all made of Stainless Steel 316L hardware to ensure an ultra-high purity for sub ppb blends.

FEATURES:

- Automatic calculation of dilution concentrations
- Automatic pressure controllers
- 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)

SPECIFICATIONS:

PRESSURE CONTROLLERS	Electronic pressure regulators	
DILUTION RATIOS	0 – 10 0 – 100	0 – 1000 other ratios possible on request
REPEATABILITY	< 1%	
ACCURACY	Better than $\pm 1\%$	
OPTIONS	Integrated heated gas purifier for Zero gas reference	
GAS CONNECTIONS	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)
Recommended maximum operating pressure:	100 PSIG (6.89 Bar)	
Recommended minimum operating pressure:	10 PSIG (0.7 Bar)	
OPERATING TEMPERATURE	10 °C to 50 °C	
SUPPLY	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
POWER CONSUMPTION	Maximum 10 watts Maximum 60 watts with optional integrated heated gas purifier	
DRIFT	< $\pm 1\%$ over 24 hours	
WEIGHT	16 lbs (13 kg)	

ORDERING INFORMATION:

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

DIMENSIONS:

