

# SS2100 Carbon Dioxide Analyzer

## SPECIFICATIONS

### Application Data

Target Components	CO <sub>2</sub> in Tail Gas Recovery Unit (TGU) Feed
Typical Measurement Ranges	0-30% (other ranges available by request)*
Typical Precision	±2% of Full Scale
Measurement Response Time	1 to ~60 seconds*
Principle of Measurement	Tunable Diode Laser Absorption Spectroscopy Non-differential
Environmental Temperature Range	-20° to 50° C (-4° to 122° F) -10° to 60° C (14° to 140° F) <i>optional</i>
Sample Inlet Pressure	70kPag (10 PSIG) typical 210kPag (30 PSIG) maximum
Sample Cell Temperature Range	Maintain at 50° C ±2° C
Maximum Cell Pressure	70kPag (10 PSIG)
Sample Flow Rate	1-2 L/min (2.1 to 4.2 scfh)*
Recommended Validation	



### Electrical Data

Power	100-240 VAC, 50-60 Hz standard
Max Current	Controller: 1 A @ 120 VAC
Controller to Cell Cable Length	1m standard (3m, 5m & 10m available optionally)
Communication	Current Loop Output 4-20 mA Isolated, 1200 ohms @ 24 VDC max load. Serial: ASCII Text RS232C standard, Modbus RS232C
Digital Outputs	Four (4) 12 VDC for valve operations: Scrubber (if required), Process/Val, Val 1, Val 2 5 SPDT (Form C) Dry Contacts: Common Fault, Val 1 Active, Val 2 Active, Val Fail, One user assignable DO to standard alarms
LCD Display	Concentration, Cell Pressure and Temperature, Diagnostic Data

### Physical

Controller Enclosure	NEMA 4X – 304 stainless steel <i>standard</i>
Controller Dimensions	343 mm H x 305 mm W x 165 mm D (13.5" H x 12" W x 6 7/16" D)*
Weight Approximately	13.1 Kg (28.6 lbs)*
Sample Cell Dimensions	0.8m cell, 438 mm H x 108 mm W (17-1/4" H x 4-1/4" W)
Sample Cell Construction	316L Series Polished Stainless Steel Standard
Number of Sample Cells	1 (Single Channel SS2100) or 2 (Dual Channel SS2100)
Dimensions with Sample System	1678 mm H x 613 mm W x 427 mm D (66" H x 24-1/8" W x 16-13/16" D)
Weight with Sample System	68 Kg (150lbs)

### Area Classification

Certification	CSA Certified for Class I, Div. 2, Groups ABCD T3C
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\* Application specific; consult factory.