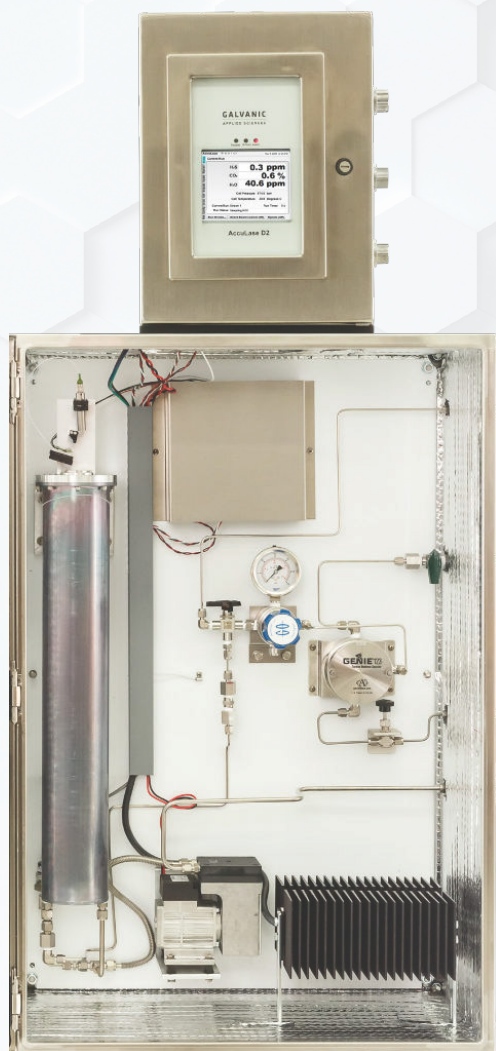


ACCULASE-GPA

| H₂S, CO₂, H₂O ANALYZER

GALVANIC
APPLIED SCIENCES

THE ONLY TDL ANALYZER THAT RIVALS H₂S TAPE SENSITIVITY



LOW MAINTENANCE

- No H₂S Scrubber Consumable
- Simple Sample System Quarterly PM

RAPID RESPONSE

- 10 Sec Response to Each Analyte
- H₂S + CO₂ + H₂O in Only 30 Sec

LOW DETECTION

- 0.15 ppm H₂S Sensitivity
- 5 ppm H₂O Sensitivity

EASY OPERATION

- 1 Cell for Multi-Parameter Analysis
- Small Footprint for Smooth Installation

MULTI-STREAM

- 1 Analyzer Monitors 4 Channels
- Fast, Thorough Purge Between Streams

ACCULASE-GPA

| ANALYZER INTRODUCTION

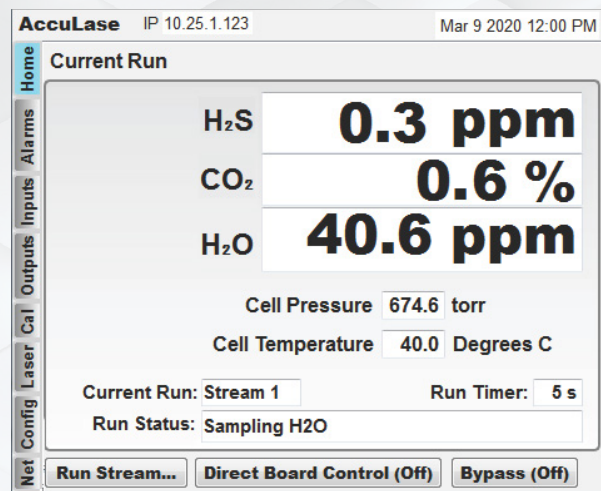
GALVANIC
APPLIED SCIENCES

ACCULASE INTRODUCTION

AccuLase-GPA™ is a process analyzer that can measure H₂S, CO₂ and H₂O in gas-phase samples. This includes both natural gas and refinery applications.

AccuLase-GPA™ provides rapid results which help operators optimize process control and custody transfer. All 3 analytes can be measured in just 30 seconds.

AccuLase-GPA™ marks Galvanic's 6th H₂S measurement technology after 40 years of field-proven gas processing experience.



ON-BOARD VACUUM PUMP = NO SCRUBBER CONSUMABLE

TUNABLE DIODE LASER SPECTROSCOPY

TDLAS is based on the NIR electromagnetic spectrum. The laser is "tuned" to specific wavelengths of interest (e.g H₂S).

The system consists of a laser board, laser launcher, and Herriott Cell. Combining the 52.6 cm long Herriott Cell with 100 laser passes, the total optical path length grows to 52.6 meters for maximum sensitivity.

VACUUM PUMP

Most analyzers employing a TDLAS method use an H₂S scrubber to compensate for interferences.

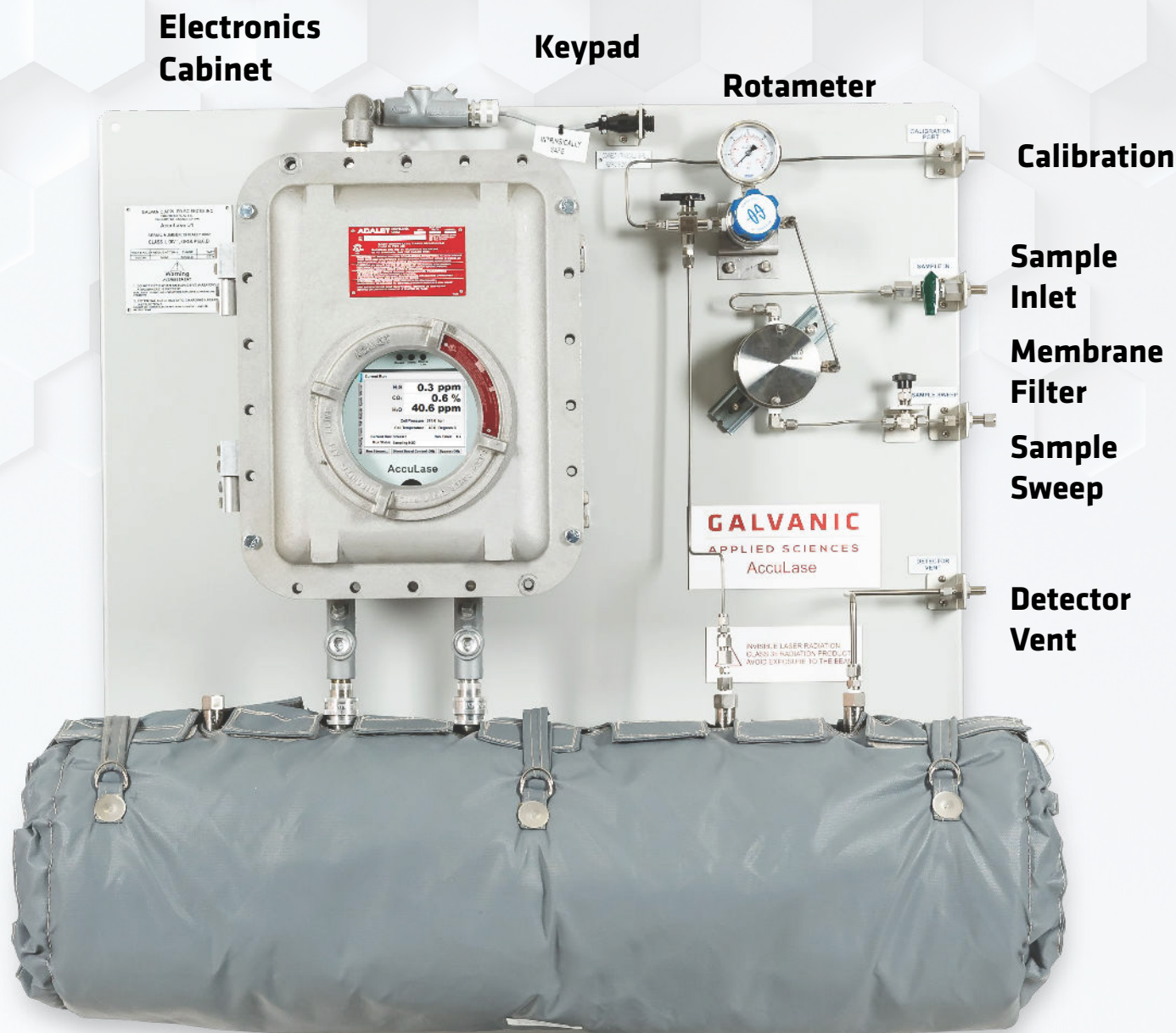
AccuLase-GPA™ is uniquely configured with an on-board vacuum pump that maintains the cell at partial vacuum pressure. This enables a direct measurement without a scrubber consumable by improving separation with interferences.



ACCULASE-GPA

KEY COMPONENTS

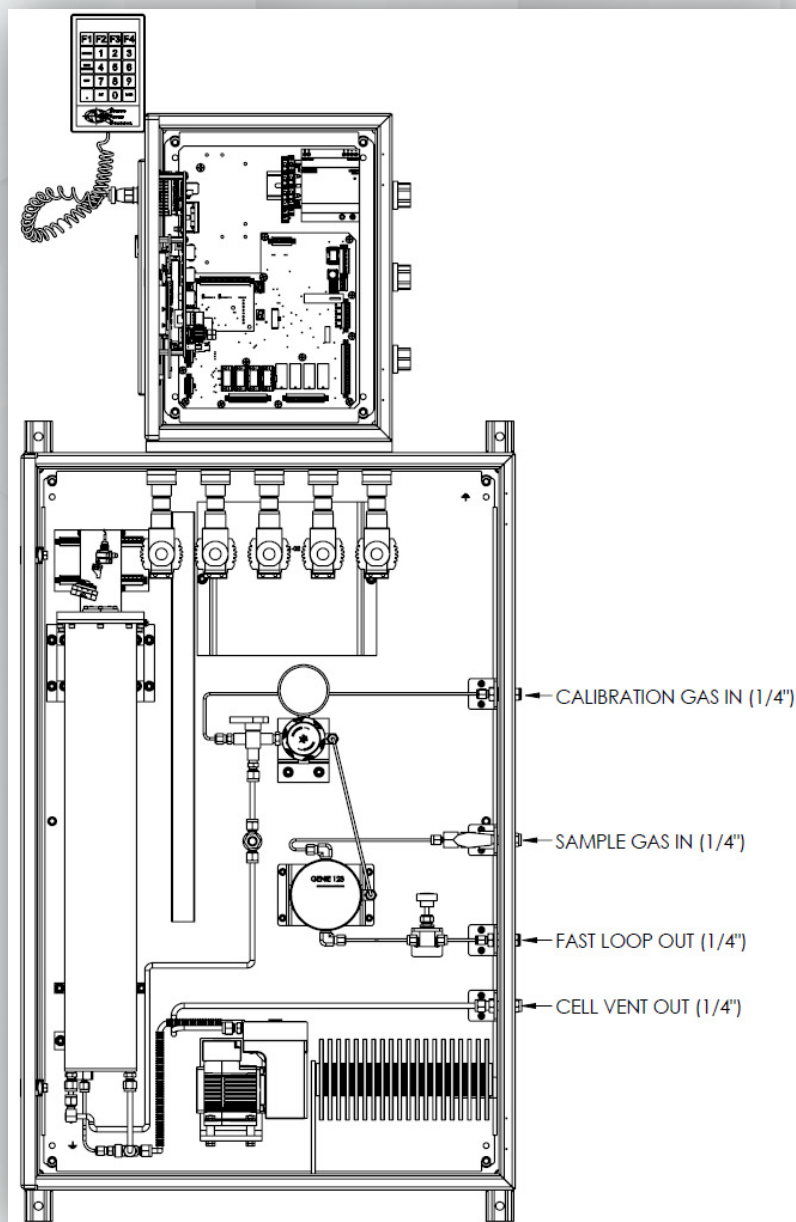
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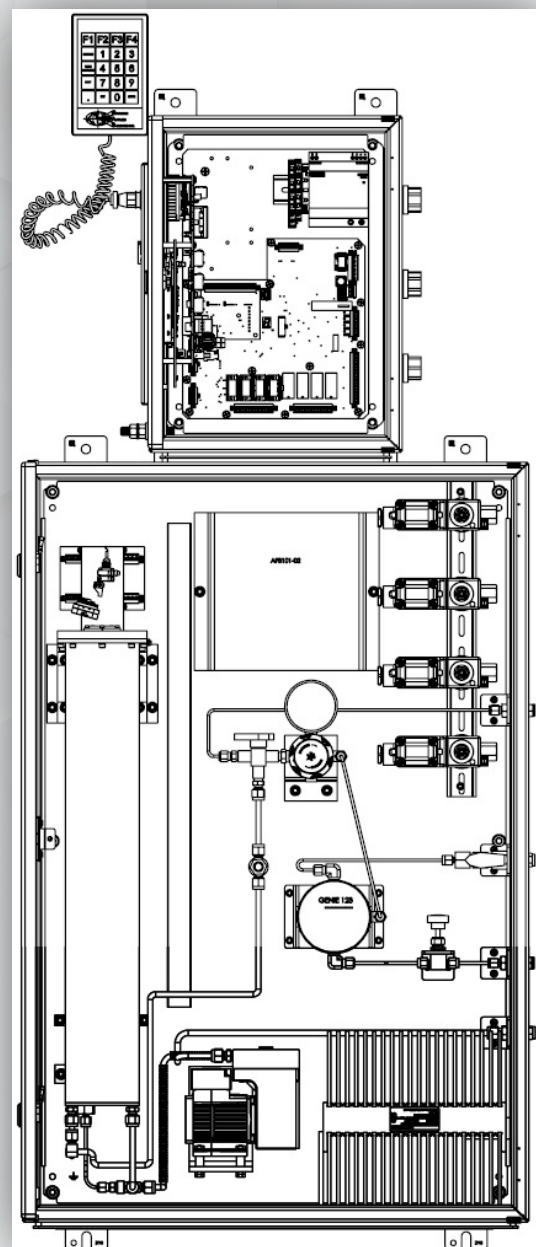
ACCULASE-GPA

| DIV. 2 AND ZONE 2 MODELS

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Class I Div. 2 Model

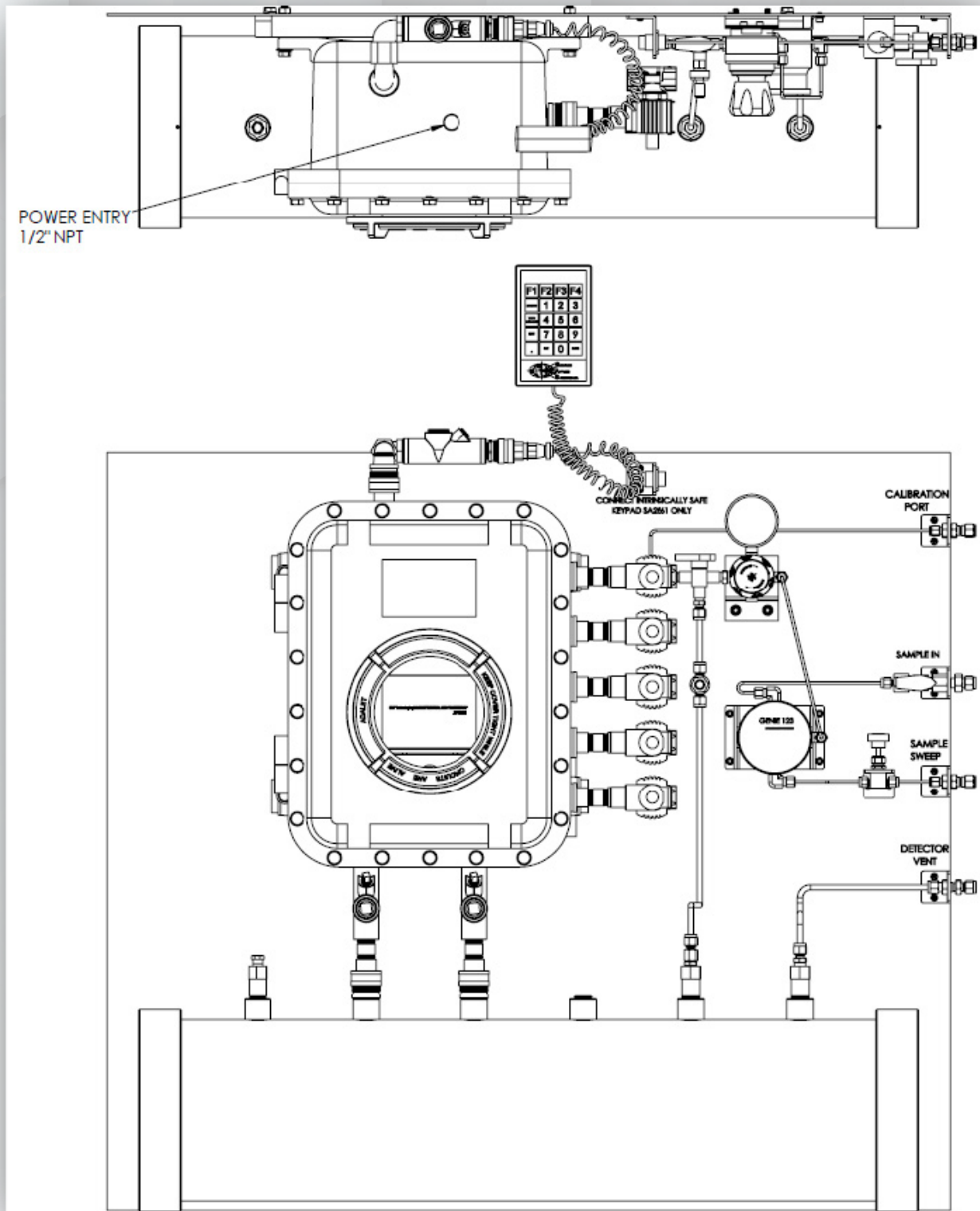


Class I Zone 2 Model

ACCULASE-GPA

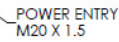
| DIV. 1 MODEL

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ZONE 1 MODEL

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ACCULASE-GPA

PRODUCT SPECIFICATIONS

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PERFORMANCE

Accuracy	± 2% F.S.
Repeatability	± 2% F.S.
Linearity	± 2% F.S.
Laser/Herriott Cell	Only 1 for All Configurations
Response Time	T90:30 Seconds
Method/Technology	Tunable Diode Laser Absorption Spectroscopy (TDLAS)

MEASURED COMPONENTS	HIGH RANGE	LOW RANGE
H2S	0- 500ppm	0- 10ppm
CO2	0- 5%	0- 1500ppm
H2O	0- 500ppm	0- 100ppm

ENVIRONMENT

Ambient Conditions	-20 to 45°C [-4 to 113°F] [Non-Condensing]*
Installation	Indoors or Suitable Enclosure
Dimensions/Weight	Zone 1 / Div. 1 Models: 914 mm x 1,016 mm x 279 mm [36" x 40"x11"] 86 kg. [190 lbs.] Zone 2 / Div. 2 Models: 1,333 mm 635 mm x 324 mm [52.5" x 25"x12.8"] 45 kg. [100 lbs.]
Enclosure Materials	Zone 1 / Div. 1 Models: Cast Aluminium Zone 2 / Div. 2 Models: Painted Carbon Steel 316 Stainless Steel or 304 Stainless Steel

UTILITIES

Power / Consumption	90- 240 VAC, 50HZ/60HZ / 120- 230 Watts*
Sample Conditions	1000- 3000 cc/min. Dry and particle free
Calibration Gas	1000- 3000 cc/min. 70- 100% of full scale per measured gas
Zero Gas	1000- 3000 cc/min. Methane or Nitrogen

*24VDC Only available for Class 1 Div. 1

COMMUNICATIONS

Analog Outputs / Inputs	4 x 4-20mA Outputs (Self-Powered) / 2 x 4-20mA Inputs (Loop or Self-Powered)
Modbus	TCP/IP or Serial RS485
Digital Outputs / Inputs	4 x SPDT
Remote GUI	Web Browser Based/Local Connection or Local Area Network
Local Display	5.7" Color LCD With Extendable Keypad

CERTIFICATIONS

North America	Class I Div. 2 Groups BCD T3 / Class I Div. 1 Groups BCD TS
ATEX / IECEx Zone 1	 G Ex db ia mb IIB + H2 T4 Gb-20° ≤ Tamb ≤ 45°C
ATEX / IECEx Zone 2	 G Ex ec op is IIB + H2 T3 Ge Tamb=-20° - 50°C