Gas Analyzer Shelters Datasheet
For TDLAS, QF, and Raman measurements

Monitoring the chemical composition and contaminants present in hydrocarbon gas streams involves selecting the correct analyzer and addressing site-specific factors which can affect analyzer operation and performance. The area safety classification, distance to the sample extraction point, access to utilities, climate conditions (extreme heat, cold, rain, snow, and wind), as well as local codes and regulations must be considered.

Custom analyzer shelters. SpectraSensors designs and builds gas analysis shelters to meet site-specific requirements. A gas analyzer shelter is engineered to mount TDLAS, QF, and/or Raman Optograff™ analyzers on a protective rack, inside a cabinet, or three-sided shelter, along with utility headers, power distribution panels, and lighting. The entire unit is assembled in our factory, crated, and transported to the site for installation.

These custom shelters together with our analyzer measurement solutions, provide an engineered solution with all components necessary to extract, transfer, condition and analyze gas samples to ensure accurate measurements and reliable operation. The precise scope for a specific application and site is determined through consultation between SpectraSensors and the client.

Racks are available with sunshades in various sizes which commonly accommodate one to four analyzers. Three-sided shelters are typically built to house one or two analyzers. Both can be built in a variety of materials. Common constructs include utility headers, light fixtures, power switches, power distribution panels, and power receptacles. Cabinets are also offered for mounting one or two analyzers and are used for those locations requiring additional environmental control.

SpectraSensors experts are available to provide an analyzer monitoring shelter suitable for various application requirements.

Key Features

- Convenient, cost-effective solutions for gas analysis projects
- Engineered for lower installation and OPEX costs
- Designed to ensure reliable analyzer operation under site-specific conditions
- Single point of contact to handle your project efficiently for on-time start-up commissioning
- Crated and transported for door-to-door delivery and installation

A gas analyzer shelter with a 2-Pack TDLAS analyzer mounted on a rack with a sunshade and fitted with fluorescent light and power distribution box.
The choices for product options below are commonly requested. If there are other requirements needed, please submit to SpectraSensors for review.

<table>
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<th>Gas Analyzer Shelters</th>
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| Racks and 3-sided Shelters    | Mounts up to 4 analyzers  
| Cabinets                      | For up to 2 analyzers, with or without heater  

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<th>Materials of Construction</th>
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| Racks and Shelters            | Metal frame with metal or fiberglass corrugated roofs  
| Cabinets                      | 304 or 316 Stainless Steel, with or without window(s)  

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| Lighting                      | Choice of Fluorescent or LED fixture  
| Power Distribution            | Maximum 6 users/units requiring power  
|                               | 120 VAC (Class 1, Div 2) or 230 VAC (ATEX Zone 1 or 2)  
| Power Switches                | Choice of one common enclosure or individual enclosures with integral breaker  
| Power Receptacles             | Choice of 120 VAC (Class 1, Div 2) or 230 VAC (ATEX Zone 1 or 2)  
| Sample Tube Bundle            | Choice of 120 VAC (Class 1, Div 2) or 230 VAC (ATEX Zone 1 or 2)  
| Temperature Controller        |  

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<th>Other</th>
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| Commonly Requested Equipment  | Stream-switching PLC (for similar stream compositions), pressure reduction system, chiller preconditioning system, analyzer outlet venting systems  

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Gas analysis shelter with a Raman Optograf analyzer mounted on a rack with sunshade and fitted with a PLC, LED light, power distribution box, and fiber optic cable junction box.

Gas analysis shelter with a TDLAS analyzer mounted inside a three-sided shelter equipped with a fluorescent light, power distribution box, and sample line heat trace controller.

Gas analysis shelter with two TDLAS analyzers inside a heated/insulated cabinet for operation in a cold weather environment.