

ORBITAL GAS SYSTEMS

GasPT® - HMI SOLUTION

EXTRA BENEFITS



HMI LIVE DATA

The HMI can also act as a communications gateway, making the live gas properties data available to several different devices simultaneously via a combination of the following communication interfaces; Ethernet, RS232 and RS485. Each individual port can be configured with one of a wide range of industry standard communications protocols that are supported.



HMI ALARMS

Hardwired analogue and digital repeat signals can be incorporated into the HMI design if required using ancillary hardware, please contact Orbital directly to discuss any specific requirements relating to signal interfaces.



GasPT® HMI

GasPT®
Sensor Units
MU & AU



GasPT®
Safety Interfaces
MI & AI

GasPT® HMI SOLUTION

The innovative HMI solution features a built-in 9.7" touch screen display with 4GB of flash memory. Providing powerful, real-time control and communications to meet your industrial control, monitoring, and data acquisition needs. The HMI communicates directly with the GasPT via an RS485 interface and captures and decodes all the gas properties data. It presents all the GasPT data in a clear and logical manner whilst also offering the following functionality;

- Live, real time display of all gas properties data
- Communications status indicators
- Historical alarms and events
- Historical / live trends of all gas properties
- Archived data log files of all gas properties
- USB data export facility (trend and event data)
- Selectable units – metric or imperial, volume or mass

GasPT®

The GasPT is a rapid and accurate inferential device, which calculates the key physical properties of natural gas (Calorific Value, Wobbe Index, Relative Density, Compressibility, Methane Number and others). The instrument updates every two seconds and has an error on measured values of $<\pm 0.5\%$, making it an OIML R140 Class A fiscal approved and OFGEM accredited device. It is simple to install and does not require any carrier or calibration gas; minimizing ongoing expenditure.

GasPT® Communications

The GasPT comes complete with a set of safety interface barriers for installation in the safe area. These compact barriers provide galvanic isolation to the analyzer and RS485 communications to and from the sensor units in the hazardous area.

As with any analyzer, the data being produced and transmitted needs to be processed, registered and supplied to the user or control system efficiently and effectively.

Basic micro-controller solutions complete this function, but simply act as an intermediary between the analyzer and control system. Therefore, Orbital have developed the standard solution into something much more complete, user friendly, versatile and interactive to provide much more functionality, by using the GasPT HMI.

TECHNICAL DETAILS

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|--------------------------|---|
| Display | Size: 9.7" Touch Screen Resolution: 1024 x 768 Backlight: LED |
| Memory | Flash: 4GB RAM: 1GB |
| I/O Ports | SD Card, USB, Ethernet, Serial (RS485), Audio (In-Built Mono Speaker) |
| Power | 24VDC 900mA |
| Environmental Conditions | Storage Temperature: -20 °C to 60 °C (-4 °F to 140 °F) Operating Temperature: 0 °C to 50 °C (32 °F to 122 °F) Relative Humidity: 10% to 90% (Non-Condensing) |
| HMI Certification | CE Marked and cULus Listed |
| Properties Displayed | Standard Properties Include; Calorific Value, Wobbe Index, Relative Density and Compressibility Additional properties may be incorporated upon request where agreed. |
| Functionality | Configuration of GasPT Parameters, Data Logging, Data Interrogation, Trend Graphs, Further Calculations and More |
| Options | Hardwired Analogue/Digital Signals |

