

# Pi<sup>π</sup> Technical Note 131

## How to Specify a Pi Analyser

### Introduction

The full range of controllers from Process Instruments (CRONOS<sup>®</sup> and CRIUS<sup>®</sup>4.0) are capable of a wide variety of measurement and control options that have been specifically designed to make process control as easy as possible. The controllers offer excellent flexibility for inputs and outputs allowing them to be connected to the majority of external hardware. The controllers also come packed with a whole host of communication capabilities designed to offer connectivity to other systems. This technical note outlines how to specify a Pi analyser.

### How To Specify A Pi Analyser

1. Choose between a CRONOS<sup>®</sup> or a CRIUS<sup>®</sup>4.0. This decision will depend upon the number of I/O you need and the functionality you need.

#### CRONOS<sup>®</sup>



- High Quality - Lowest Cost
- Up to 2 sensors
- Up to 4 analogue outputs\*
- Multilingual
- High resolution grayscale display (colour display optional)
- 1 comms card (no remote access)
- Graphing and datalogging (downloadable data logs optional)
- Up to 8 relay outputs
- Up to 8 digital inputs

#### CRIUS<sup>®</sup>4.0



- Highest Quality - Low Cost
- Up to 16 sensors
- Up to 32 analogue outputs\*
- Multilingual
- High resolution colour display
- Up to 3 comms cards (remote access)
- Graphing and datalogging (downloads)
- Up to 32 relay outputs
- Up to 32 digital inputs

**For more information please see the individual brochures for CRONOS<sup>®</sup> and CRIUS<sup>®</sup> 4.0**

\*There are a maximum number of I/O slots in each unit. Up to half of them can be used to attach sensors. Any slots free can then be used for analogue outputs.

2. Choose your primary measurand, e.g. Conductivity. That means you are starting with a CRONOS<sup>®</sup> or a CRIUS<sup>®</sup>4.0 ConductiSense. (HaloSense is for chlorine, OxySense is for dissolved oxygen, OzoSense is for ozone etc). For a full list of available measurands, please visit our website, [www.processinstruments.co.uk](http://www.processinstruments.co.uk).

3. Choose any other inputs (sensor bundles) that you might want as well, e.g. pH or Free Chlorine etc. For a full list of available sensors, please visit our website, [www.processinstruments.co.uk](http://www.processinstruments.co.uk).



**pH Sensor**

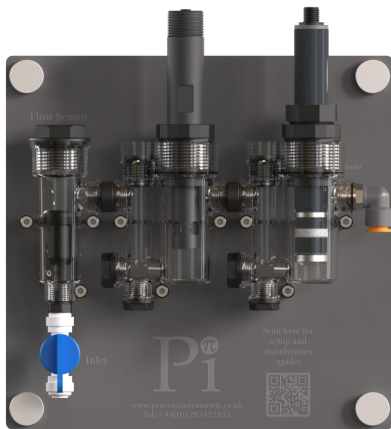


**Chlorine Sensor**



**ORP Sensor**

4. Choose any flow cells or autoflushes that you might need for your sensors.



**Double Open/Closed Flow Cell**



**AutoFlush Cell**



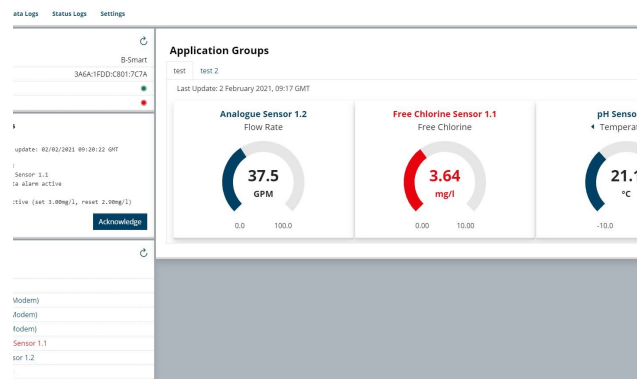
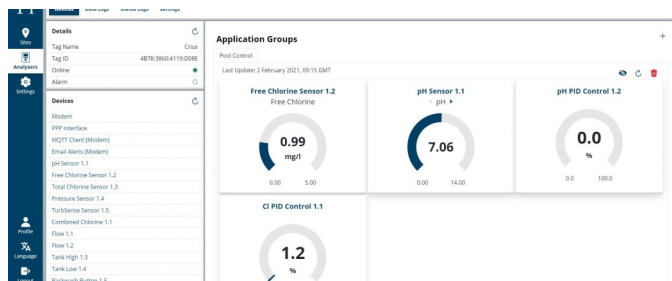
**Single Open/Closed**

5. Choose how many digital inputs (for things like flow or level switches) you will need.

6. Choose how many digital outputs (relays) you will need. Don't forget that a PID control will need either a relay or an analogue output to go with it.

7. Choose how many analogue outputs you will need to relay information or control a pump. Don't forget instruments and bundles don't come with these as standard. Also don't forget that a PID control will need either a relay or an analogue output to go with it.

8. Choose any extras you want like PID control (you will need one per measurand that you want to control).



**Remote Access Screenshots**

9. Choose any communications options that you need, like Profibus or Modbus or Remote Access.

And you're done! Send all that to one of Pi's sales team in your country or direct to Head Office in the UK and we will send you your quote by return. For more information, visit [www.processinstruments.co.uk](http://www.processinstruments.co.uk) or contact us on +(44) 1282 422835 to speak to one of our team of application specialists.