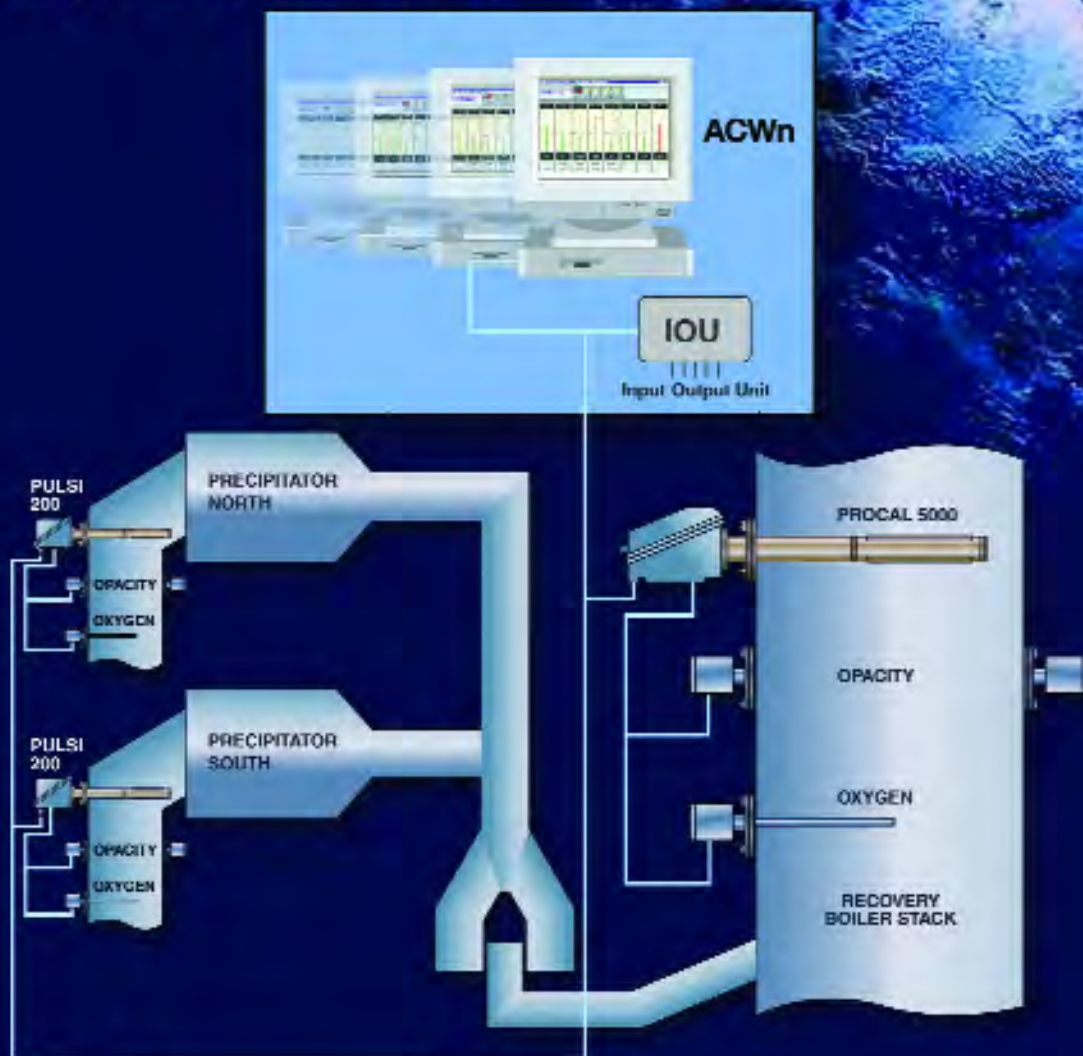


# PROCAL

## ANALYSER CONTROL for Windows™ Network (ACWn)

[www.procal.com](http://www.procal.com)



European  
EN14181  
QAL 3  
Compliant

US EPA  
40 CFR  
Part 60&75  
Compliant



ATEX

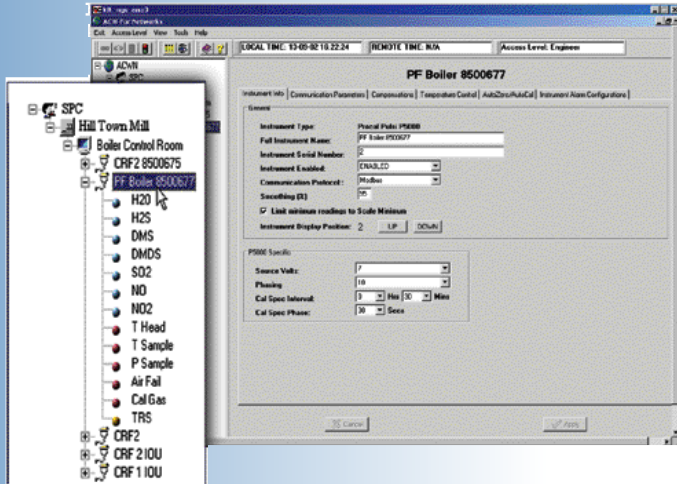


sira  
Certification System  
ISO 9001:2009



# Analyser Control for Windows™ Network (ACWn)

The Procal range of analysers communicates via a serial data link to a PC running ACWn.



The **ACWn** is a stand-alone software package which provides all the display requirements of Procal analysers including the incorporation of third party data. In this way it can be the basis of a complete CEM system. The software is OPC and ODBC ready and is therefore able to provide data to client programs running on the same network, such as SCADA software.

The program is configured to collect data running on plant-mounted Procal Analysers. Each ACWn can collect and display data from up to eight analysers and Procal Input / Output Units.

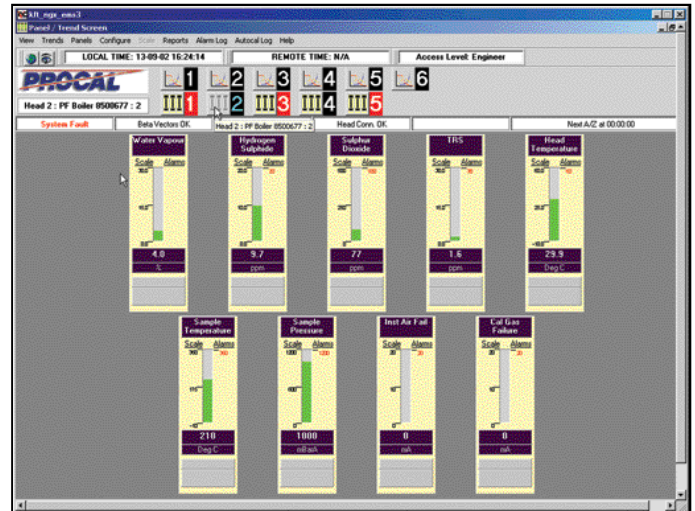
ACWn is designed to be used with mouse, trackerball and other pointing devices. All operations can also be achieved by the use of a keyboard. ACWn is designed to be installed on a computer running Windows™. Please refer to Procal Analytics Ltd (contact details below) for computer specification.

## Panel Screen

The data from up to sixteen channels for one instrument are presented in an individual front panel mimic comprising:

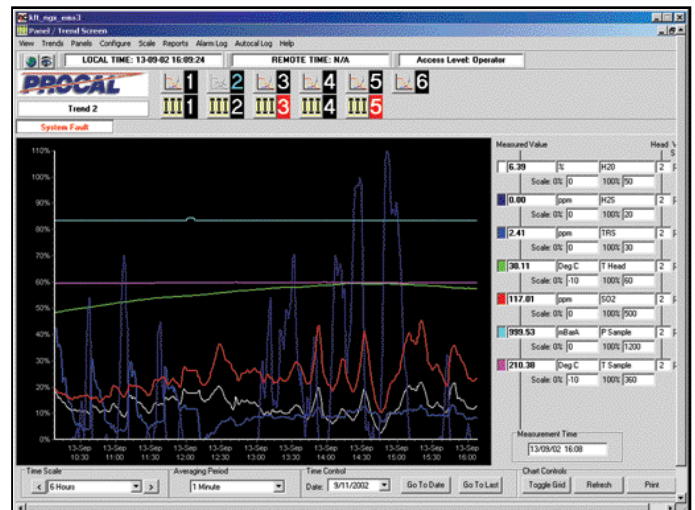
- Measurement value in digital and analogue form
- Alarm configuration and levels
- Alarm status (Bar green = OK, Bar red = High alarm active, Bar yellow = Low alarm active)
- Normalisation (equivalent correction for carbon dioxide or oxygen).
- Wet / dry basis reporting.

Also shown on the upper status line of the screen is:



- System diagnostic alarm with access to a detailed child window
- Autozero / calibration status
- Analyser connection status and analyser-specific status panel screens for each instrument.

## Trend Screen



Up to eight channels of historical data each from any instrument are presented in X-Y chart form. On the right hand side of the chart is the identification of each measured component, its scale, the colour of the trace and the measured value. The date and time at which the measurement was taken is indicated in the **Measurement Time** box in the lower right hand corner of the screen.

This time will initially be the current time (**Now**) but by use of the **Time Scale** scroll and mouse control,



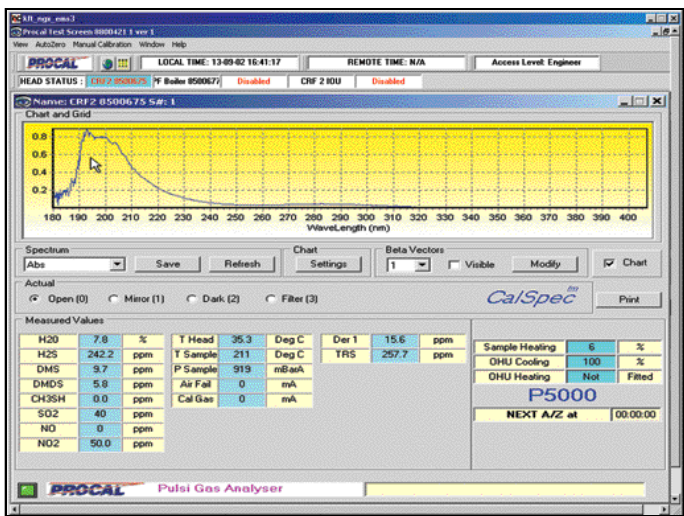
a dotted cursor can be moved to any part of a screen for any time and the measured value at that point indicated. The **Averaging Period** box allows the rolling average of the measured value to be varied. Additional trend screens can be added by the user.

## Reports

Reports can be generated to meet the requirements of the majority of national environmental authority reporting requirements. These include:

- Calibration status report (zero and cal report)
- Trend reports
- Hourly, daily and weekly averaging reports
- Excursion report
- Special reports can be configured—please consult Procal Analytics directly

## Test Screen



The data from each analyser is displayed on an individual test screen. The screen displays data from each measured signal including any offset and the current calculated concentration. In addition, it displays the head temperature, sample temperature, sample pressure, and up to three input signals from external sources, such as dust, oxygen, velocity, and a set of channels derived from these measured channels.

## Security

The system incorporates three levels of password protected adjustment levels: Operator, Supervisor and Engineer.

## System technology

Each ACWn can support up to eight Procal analysers including inputs from third party instruments, for example oxygen, opacity and velocity. The ACWn comes network ready and therefore data from multiple ACWn systems can be displayed on a plant master ACWn. In addition the system can be connected via telecom and WAN to other sites for other reporting, monitoring or service functions, it is also OPC Client Ready (PC Internal or over a network).

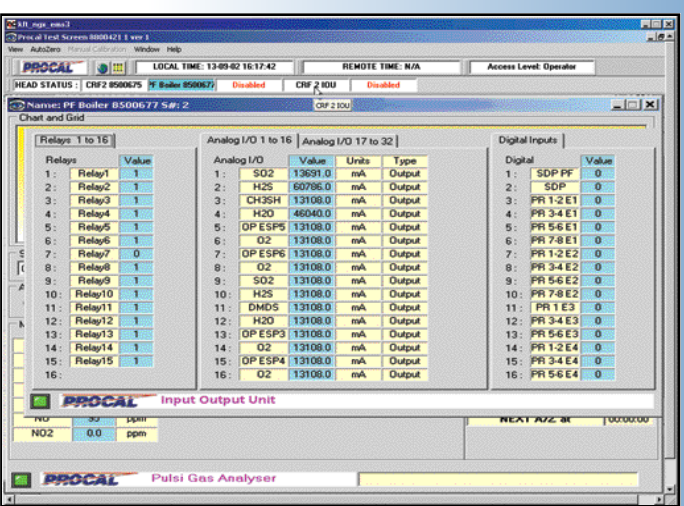
## Corporate reporting

Data from several plants can be collected and displayed on corporate ACWn system on LAN or WAN networks.

## Procal Analytics Analyser Support Group

If the system is connected to telecom link or WAN, then the Procal Support Group can monitor the performance of the CEM system and identify any malfunctions or deterioration, thereby reducing downtime of the CEM system. This support can either be part of a service contract or carried out on request.

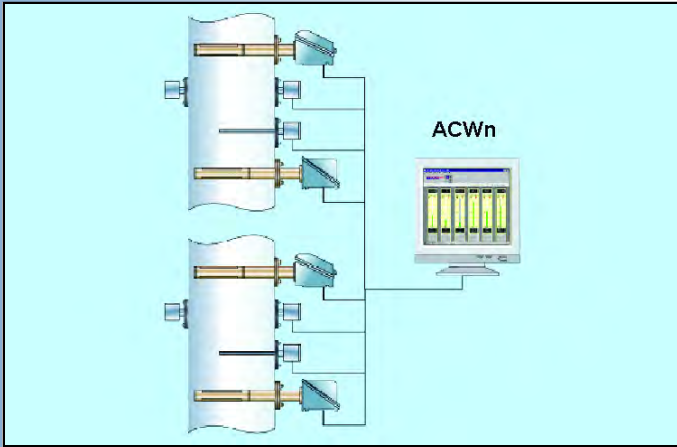
## Input / Output Unit



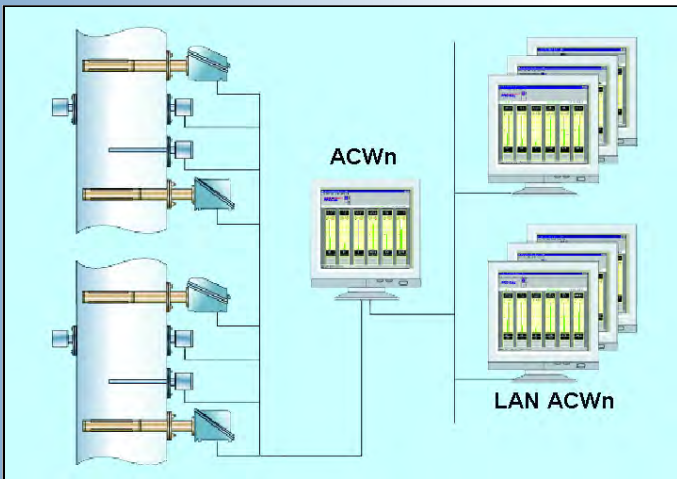
If required input / output units can be connected into the analyser network. Each unit enables the system to transmit and receive up to 32 isolated analogue signals per unit and up to 16 digital inputs. The unit is also equipped with up to 32 relays, which can be configured as either fault alarms or high / low alarms on the monitored channels. For the Panel Screen all 32 analogue and 16 digital inputs can be displayed on up to three panel tabs, 16 per tab.

# Analyser Control for Windows™ (ACWn) Configuration Examples

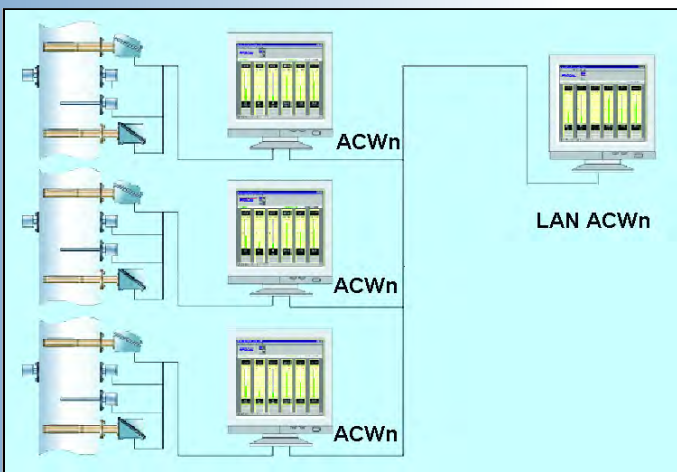
Dual CEM's System including CO, CO<sub>2</sub>, NH<sub>3</sub>, NO<sub>x</sub>, SO<sub>x</sub>, O<sub>2</sub>, Dust



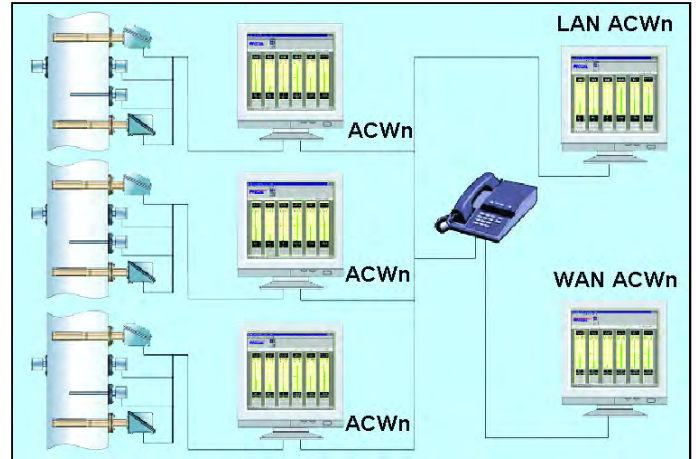
Dual CEM's System with multiple workstations on plant network



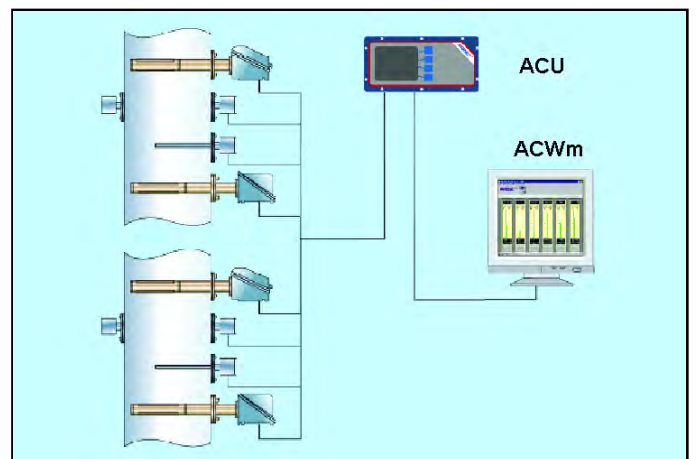
Triple CEM's System with individual PC based control and reporting also with single net Network terminal.



Triple CEM's System with individual PC based control and reporting also with single network terminal and modem connected remote terminal.



Dual CEM's System with IP65 field mounted controller and PC based terminal.



**PROCAL**

**Procal Analytics Ltd**

5 Maxwell Road, Peterborough PE2 7HU, United Kingdom  
 Tel: +44 (0) 1733 232495 Fax: +44 (0) 1733 235255

e-mail: [post@procal.com](mailto:post@procal.com)

Internet: <http://www.procal.com>

Procal reserves the right to alter these specifications without prior notification.