

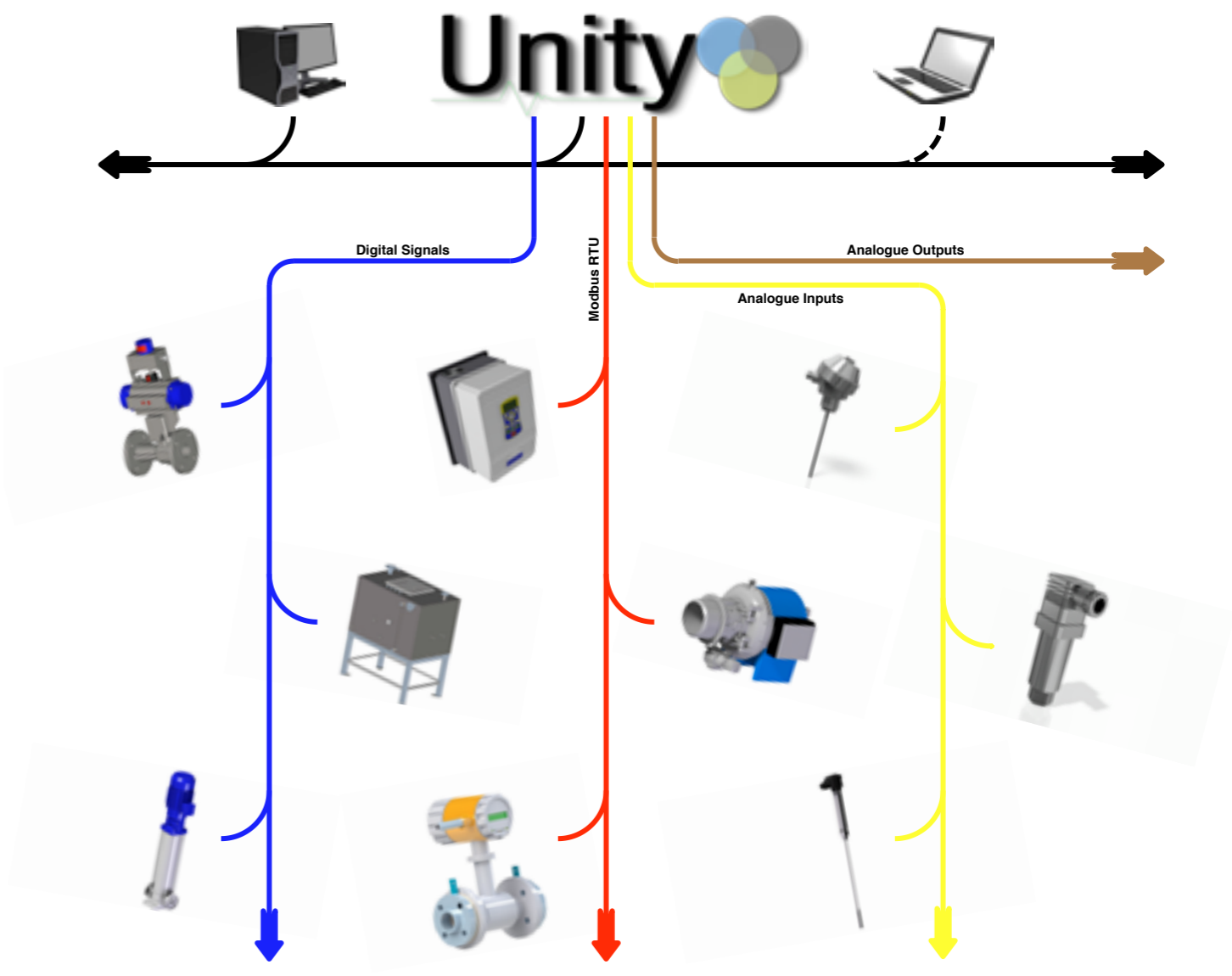
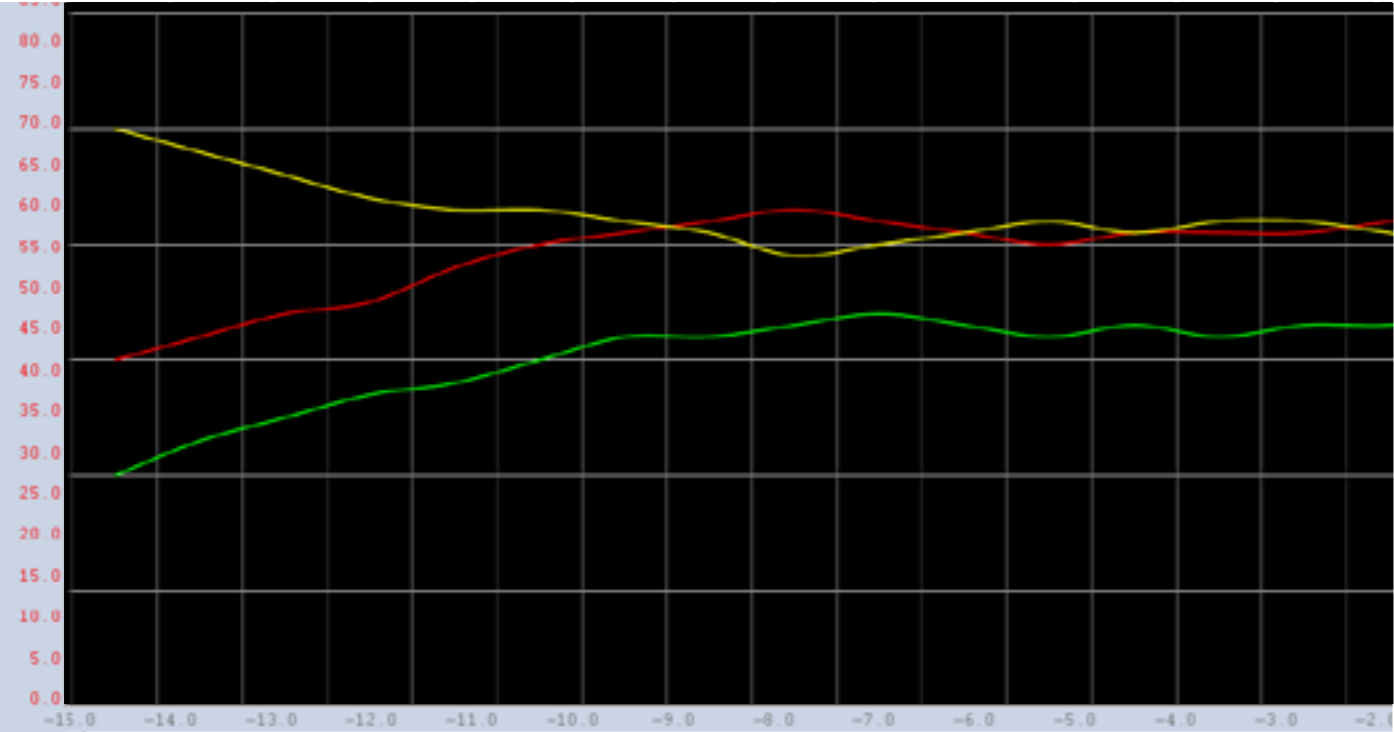


# THE USER INTERFACE

Accessible via the built-in touch screen or remotely via TCP/IP on a Mircosoft Windows based desktop PC; the easy to use interface allows for quick access to trend data, alarm logs, and user controllable functions such as time sequencing, fuel switching or set point adjustment.

A simple green, amber, red warning system ensures that the operators attention is quickly drawn to the changes in the condition of the plant.

User configurable trends allow operators to assign any system value to trend on seperate operator stations.



# THE BOILER HOUSE

Unity was developed to monitor and control an entire boiler house installation from one central control point giving the system a significant advantage over using several third party controllers to operate different parts of the boiler house. The networked structure above shows a brief overview of some items that can be controlled and by what means of communication.

As a standard the unit will allow the operator to program and monitor the following through the HMI :

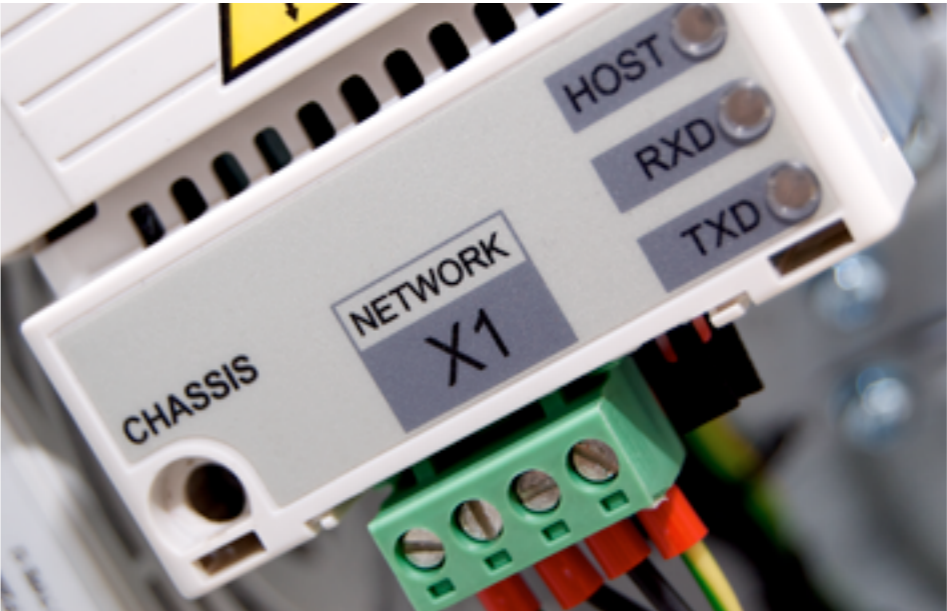
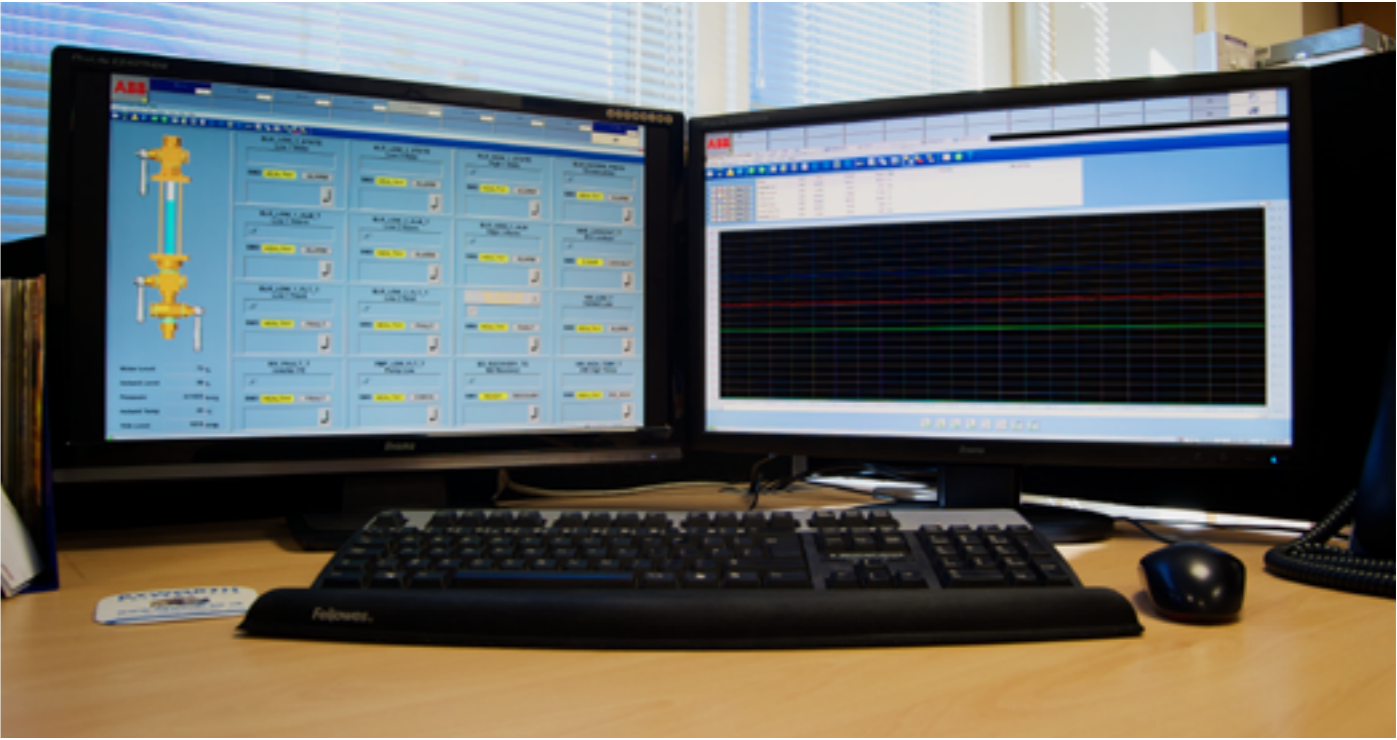
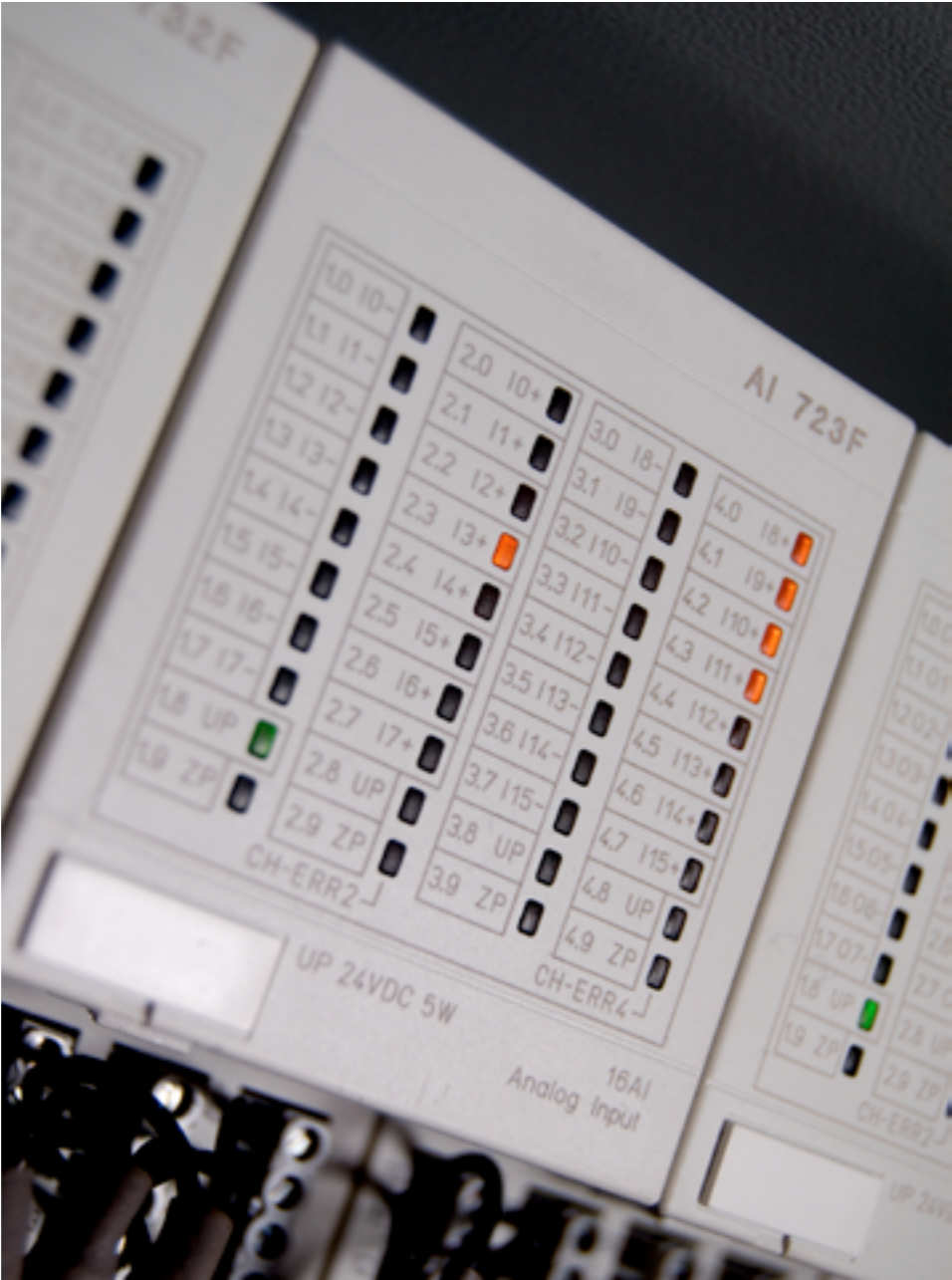
- Time scheduling
- Selectable setback pressures
- Night setback
- Automated two stage cold start
- Trending of measured values
- Logging of alarms
- Automated water level tests
- Automated feed pump rotation
- Automated bottom blowdown
- Operator user groups
- Hotwell level and temperature control
- Hints to possible fault causes

# THE SYSTEM

The Unity control system offers an unprecedented level of visibility and control over everything in your boiler house from water treatment, right through to the steam header in one easy to use interface.

Capable of handling dozens of simultaneous I/O's, Unity is suitable for any boiler house from control of a single boiler to complex multi-boiler, multi-fuel installations incorporating waste heat and composite boilers.

Intelligent decisions based on the systems measured values are made to ensure efficient plant operation and reduce operational stress to decrease downtime and increase the plants life.



# CONNECTIVITY

Remote control and monitoring is available via Modbus or TCP/IP as standard with other protocols available on request.

The integration of Modbus throughout makes communicating with burners, inverter drives and field based meters for example extremely simple bringing the full wealth of information from these devices to a central point for processing.

A log of alarms and tests carried out is stored on the local device and can be output to a network printer on the triggering of such an event (such as an alarm or the completion of the boiler weekly test).



Unity is able to accept, process and trend various boiler house values including :

- |                            |                       |                           |
|----------------------------|-----------------------|---------------------------|
| •Boiler pressure           | •Hotwell level        | •Flue temperature         |
| •Manifold pressure         | •Hotwell temperature  | •Steam, water & gas flows |
| •Boiler water level        | •Blowdown temperature | •Gas pressure             |
| •Boiler water conductivity | •Flue gas analysis    | •And many more ....       |



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