

COMBUSTION PROCESS MONITORING & CONTROL



# PROTHERM 470 FOR COMBUSTION PROCESS

## FEATURES & CHARACTERISTICS

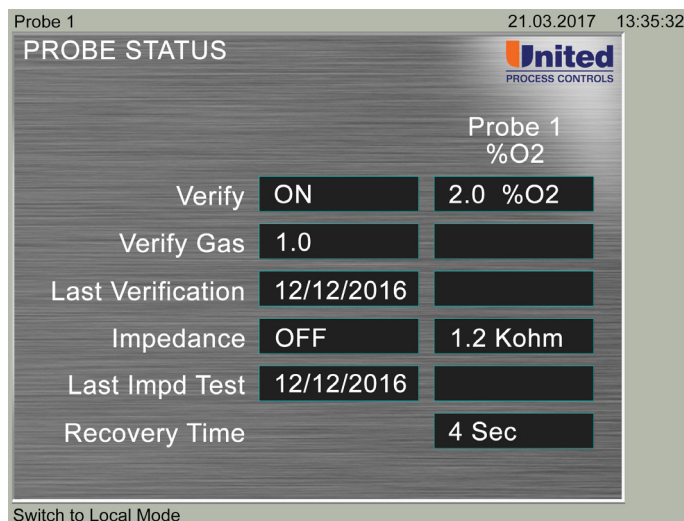
The **PROTHERM 470** controller is designed to monitor, control, record, and archive combustion processes running in a furnace or simultaneously in multiple chambers. This powerful controller is suitable for various types of batch and continuous operations and can be installed on new, retrofit, or refurbished equipment. The fully configurable I/O channels can be used with oxygen sensors or any sensor with an analog output signal or Modbus communications.

## MAIN FEATURES

- Visual display of the sensor values
- Up to 4 oxygen sensors may be displayed and logged
- Can hold up to 32 PID control-loops to regulate configured process parameters such as temperature, process pressure, oxygen potential, etc.
- Compatible with most sensor outputs
- All process parameters can be configured with alarm limits
- Notification and processing of alarms
- Process variables can be viewed and recorded with chart recorders
- Recipe log files in PDF and ASCII-CSV format can be downloaded to a remote computer for archiving
- Up to 99 treatments and templates can be created and modified

## OPERATING CHARACTERISTICS

- Control knob or touch-enabled screen enables user to select input fields and enter data.
- Function keys are used for accessing the most important functions.
- Users access to different functions is password protected.
- A PC keyboard can be connected through a USB port.



## INTEGRATED WEB SERVER

- A remote computer can be connected to the device through a standard web browser.
- Process logs in PDF and in ASCII-CSV format are kept for 30 days. They can be downloaded and then further processed with any appropriate PC software (e.g. Microsoft® Excel).
- A powerful Java-based configuration tool can be downloaded and installed on a local PC for configuring all the device parameters.

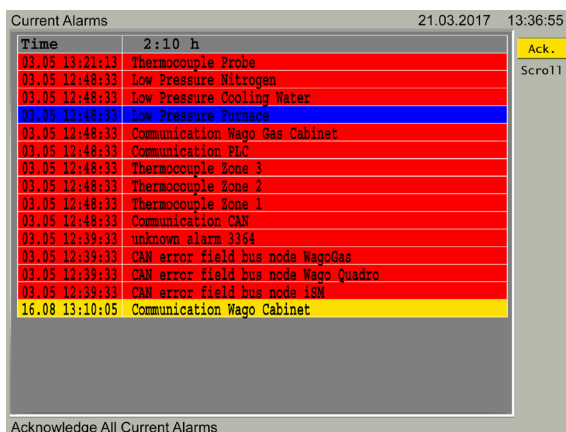
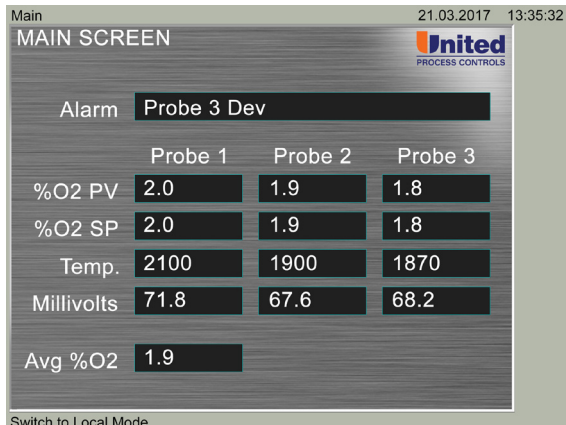
## BUILT-IN FUNCTIONS

- Mathematical model for calculating atmospheric parameters from gas inputs and sensor values
- Automatic sensor impedance test
- Automatic sensor verification

## CONFIGURATION

- Control loops, process graphics, process variables and more can be configured with a user-friendly proprietary configuration software.
- The set-up of the PID parameters and other control functions are accessed via the configuration key.

## SCREENS



## PROCESS SETTINGS SCREEN (CONFIGURABLE)

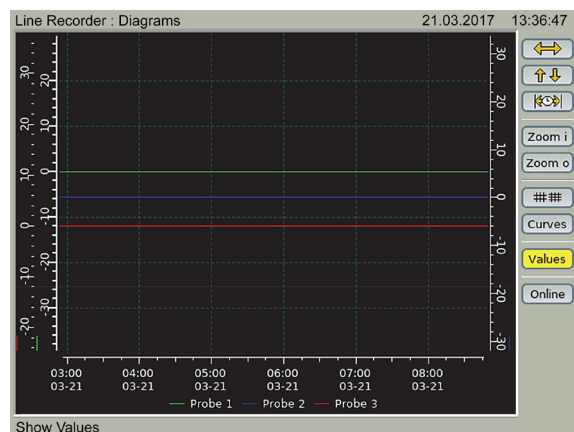
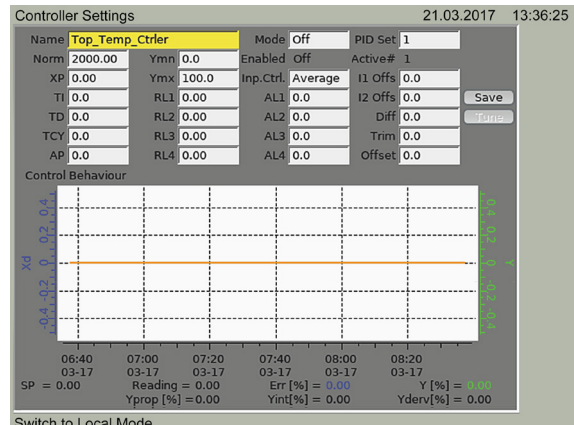
- Display of selected process variables
- Input screen for process parameters

## PROCESS MANAGEMENT

- Treatments can be created and modified
- Jobs can be started and stopped
- Templates can be created and modified

## HISTOGRAMS (CONFIGURABLE)

- Paperless flexible chart recorder
- 8 chart recorders (screens) displaying up to 8 process variables (64 analogue values)
- Zoom functions
- Slide ruler displays individual settings and values



## CONFIGURATION

- Special menu for the configuration of integrated controllers
- PID set-up
- Adjustment and setting of control parameters
- Real-time graph for displaying the control parameters and checking the settings

## ALARM MENU

- Comprehensive alarm processing
- Recording of all alarms

