

FURNACE ATMOSPHERE MEASUREMENT & CONTROL









The **PROTHERM 20** is designed for cost-effective measurement and control of excess oxygen. The unit provides simple 2-point (on/off) control, continuous PID control, or 3-point stepping control.

FEATURES

- Three analog inputs, two are universal
- Two freely configurable analog output, e.g. as process value output
- High-impedance mV input for O₂ sensors
- Oxygen calculation (ppm /%O₂, automatic adaptation)
- Carbon content calculation (%C, 2 decimals)
- Dewpoint calculation (°C, °F selectable)
- Self-Tuning to the setpoint without oscillation
- Valve controller with position feedback and DAC monitoring
- Universal continuous/switching version, i.e. reduced stocks of spare parts
- 100 ms cycle time, also suitable for fast control loops
- 20 ms as shortest pulse-length
- Customer-specific linearization for all sensors
- Settings can be blocked via password and internal switch for high security
- Extended temperature range up to 140°F (60°C) allows mounting close to the process

- Easy 2-point or offset measurement correction Emergency operation after sensor break by means of the "output hold" function
- Logical combination of digital outputs, e.g. for general alarm
- Manual gain scheduling
- RS 422/485 Modbus RTU interface
- PROFIBUS-DP interface
- Built-in transmitter power supply
- Splash-water proof front (IP 65)
- Front interface port
- BluePort®Front interface and BlueControl software
- Customer specific data-set
- Maintenance manager and error list
- 'Day & Night' display shows plain text and bar graphs
- Type tested to EN 14597 (replaces DIN 3440) and cULus

SPECIAL FEATURES

- Monitoring and PID control of:
 - C content,
 - oxygen content or
 - dewpoint
- Input for connecting lambda-sensor
- Automatic and manual sensor purging
- Sooting alarm
- Gas-correction input CO or hydrogen (H₂) compensation
- Calibrating function for the atmosphere input

