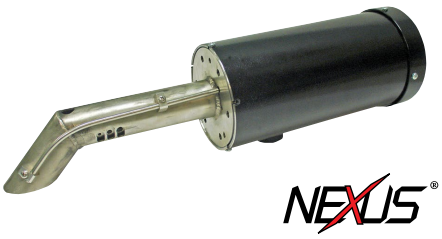
Nexus® Combustion Efficiency Systems
Sensors

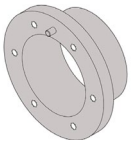
Oxygen Probe (NXCESO2 / FXCESO2)

The oxygen probe is designed to be used with the Fireye burner controls (NXF4000 or PPC 4000) and provides continuous oxygen concentration readings. This allows the burner controller to trim the air or fuel servo to obtain optimum combustion efficiency.

Features

- Provides continuous oxygen readings
- Allows control to trim air or fuel servo
- Provides stack temperature
- Field replaceable oxygen sensor cartridge
- Data available via Modbus-RTU
- Available in 8.5”, 16” and 30” insertion depth
- Available mounting flange and cover





35-381-2
Mounting Flange

129-189
Flange Cover

Combustion Monitor (CM-420)

The combustion monitor is designed to connect to a Fireye (in situ) oxygen probe (NXCESO2 or FXCESO2, which includes FXO2TRIM-1 interface). The combustion monitor allows Fireye oxygen probes to be used in applications without Fireye efficiency controls.

Features

- Modbus RTU via RS-485
- IP65 (NEMA 4X), indoor use only (not UV stabilized)
- TFT 177.8mm (7”) screen with 800 x 480 resolution

Ambient Air Temperature Sensor (FXIATS-140)

The ambient air temperature sensor offers a fast, stable, repeatable, and accurate means of measuring ambient air temperature in harsh environments.

Features

- For use with burner/boiler efficiency calculations
- -40° to 140°F (40° to 60°C)

Plant Master (PMSTR-4000)

The plant master provides central control of steam or hot water systems for up to eight Fireye burner controls (NXF4000 or PPC4000). The connection to each control uses standard Modbus wiring to a dedicated sequencing bus.

Features

- Modbus RTU via RS-485
- IP65 (NEMA 4X), indoor use only (not UV stabilized)
- TFT 177.8mm (7”) screen with 800 x 480 resolution

fireye.com

Nexus® Combustion Efficiency Systems
Sensors

Temperature Sensors (TS350-x / TS752-x)

The temperature sensors are designed for use with the fuel air ratio controller (PPC4000). The temperature sensors utilize a platinum, positive temperature coefficient sensing element to provide indication of water temperature, stack temperature, boiler water temperature of a steam boiler, and outdoor air temperature.

Features

- 4-20mA output, linear with temperature
- Insertion length varies from 2” to 8”
- Stainless steel thermowell included with 1/2” - 1/4” NPT mounting

ITEM	TEMPERATURE RANGE	LENGTH
TS350-2	32° to 350°F (0° to 176°C)	2”
TS350-4	32° to 350°F (0° to 176°C)	4”
TS350-8	32° to 350°F (0° to 176°C)	8”
TS752-2	32° to 752°F (0° to 400°C)	2”
TS752-4	32° to 752°F (0° to 400°C)	4”
TS752-8	32° to 752°F (0° to 400°C)	8”

Pressure Sensors (BLPS-x)

The pressure sensors are designed for use with the fuel air ratio controller (PPC4000). The pressure sensors utilize a solid state pressure transducer to indicate steam pressure.

Features

- Pressure transducer
- 4-20mA output, linear with pressure
- 1/4” NPT mounting
- Screw terminal connections and conduit adapter cover

ITEM	TEMPERATURE RANGE
BLPS-15	0 to 15 psi (0 to 1030 mb)
BLPS-25	-14.7 to 25 psi (-1013 to 1720 mb)
BLPS-30	0 to 30 psi (0 to 2070 mb)
BLPS-200	0 to 200 psi (0 to 13.8 bar)
BLPS-300	0 to 300 psi (0 to 20.7 bar)

Flame Scanners

UV1AL-3	UV90L-1	48PT2	85UVF/IRF	95DSS3
				
UV 1/2” NPT straight flame scanner, non-continuous operation	90° UV flame scanner, non-continuous operation	Infrared 1/2” NPT straight or 90° flame scanner, continuous or non-continuous operation	Phoenix integrated flame scanner utilizing a solid state flame sensor	InSight® II integrated flame scanner with UV and IR sensors

For more information, please contact your local Fireye Distributor.

fireye.com

MF-00-2-0700-0-040 (2022/03)

Join us on