





Fireye enjoys
a worldwide
reputation as a
technical pioneer
and leading
manufacturer of
flame safeguard,
combustion
efficiency and
burner controls
for a wide range
of industrial
and commercial
applications.



#### Who is Fireye?

#### Fireye, the first name in flame monitoring and combustion controls.

Accurate, reliable flame monitoring is critical for burner safety and Fireye has been delivering industry-leading and dependable flame safeguard controls for more than 90 years. Fireye enjoys a worldwide reputation as a technical pioneer and leading manufacturer of flame safeguards and burner controls for a wide range of industrial and commercial applications.



Our products are sold through a global network of technically knowledgeable distributors and representatives, each with trained specialists in combustion systems and boiler safety. We offer unmatched product quality, technical excellence, and customer support. Why

buy Fireye? The answers are simple: reliable products, technical excellence, industry experience and ongoing support.

#### Our pedigree of industry firsts is one of the richest in the marketplace

Fireye was founded in the late 1930s and, since then, the company's success has expanded through a series of product innovations and technical breakthroughs.





1930s

founded by Dr. Arthur Metcalf

safeguard

1940s

**FIRST** Infrared scanner to monitor both gas and oil flames

**1950S** 

**FIRST** Commercial industrial electronic flame safeguard

a photoelectric device that detects the presence of an oil flame in less than a second



FIRST Totally solid-state

autodiagnostics program

with communication capability

programming controller

**FIRST** Multilingual

**FIRST** Multi-burner scanner

able to discriminate signals from adjacent burners



microprocessor flame scanner capable of reporting data in



2020s

FIRST scanner software to understand combustion

**FIRST** Multi-burner

three dimensions for improved flame discrimination

# Reliable combustion management product range

Fireye's flame detection and control capabilities are the best in the industry. Our flame scanners cover the full spectrum from ultraviolet to infrared to flame rectification, ranging from simple on-off protection to highly sophisticated advanced flame signature profiling.

#### Single-burner product solutions for every system

In the commercial and small industrial marketplace, combustion flame safety is mandatory. Schools, hospitals, apartment buildings, and office complexes all rely on flame scanners to monitor their boilers and heating plants.

Fireye offers a wide variety of scanner types, from ultraviolet to infrared and photo cell to flame rectification for both single-burner and multi-burner applications of various boiler sizes or fuel capabilities.

- Highest level of scanning accuracy and flame protection
- For use with various fuel source types – gases, coal, biofuels, or multiple grades of fuel oil
- Ultraviolet scanners to monitor the cool blue of gas
- Infrared scanners to monitor the bright orange of an oil flame
- Photo light detection and flame rectification sensors that can physically detect the slightest hint of a white-hot flame barely visible to the naked eye

#### Multi-burner solutions for an extra level of safety

Unlike single-burner scanners designed to sense a flame and provide limited adjustments and shutdown options, Fireye multi-burner scanners provide added functionality. Power stations, oil refineries and heavy industry require higher standards of flame detection.

- Ability to discriminate between individual flames fired in the same large combustion chamber
- Fully compatible with most boiler controls and burner systems
- Provides extra degree of assurance and flame safety
- Features microprocessor technology, LED displays, alarms and software diagnostics
- Ability to communicate the live status of a burner to an operator
- Ability to integrate into a more complex industrial heating system



### Innovative scanners and flame monitors

Flame scanner safety has moved from controls that operate with bulky vacuum tubes to those run by increasingly sophisticated microprocessors. Fireye has flame detection solutions that feature ionization technology, vacuum tubes, lead sulfide and microprocessor options.

- Flame Rods
- UV90L Series
- UV1A Series
- 48PT2 Series (IR)
- 45UV Series
- Simplicity (65UV Series)
- Phoenix Series 2 (85UV & 85IR)
- InSight® I
- InSight II
- InSight Series4



### Breakthrough products for burner control and efficiency

Our burner and efficiency controllers are suitable for small, single-burner product configurations to large, multiple-boiler industrial applications. Features include backward compatibility with alternate brands, Modbus communication, servo motor functionality and O2 trim for combustion management.

- BurnerPro™
- BurnerLogix®
- Nexus® NXF4000 / PPC4000
- Nexus NX6100 / PPC 6000
- Nexus NXEXP300
- Nexus NXM2G



### Creating an ignition spark every time

Good ignition is critical to ensuring a smooth light up process in large industrial applications such as power generation and petrochemical plants. Fireye offers a range of customizable ignition devices utilizing either high energy or high tension. Proof of spark and proof of flame can also be provided.

- SureFire™ High Energy Igniters
- SureFire High Tension Igniters
- SureFire Portable Igniters
- SureFire Natural Draft Gas Pilots
- SureFire Forced Draft Gas
  Pilots



### Software to understand your flames

Fireye Explorer software (FEX) allows users to communicate with multiple InSight II and InSight Series 4 flame scanners. Users can remotely view scanner graphical displays of all real time signal outputs as well as customize scanner settings. Communication occurs via OPC interface to users' DCS or BMS.

## Smart device communication and interfaces

Many of our flame scanners, controllers or HMI's can also utilize smart communication through Modbus and TCP/IP via Ethernet to other PLCs or a main DCS.

Whether your application requires high flame sensitivity, high flame differentiation, high safety integrity, explosion proofing or worldwide agency approvals, Fireye has the product to fit the need.























#### Industry-leading quality and customer service

Reliable quality and unmatched technical service is what sets Fireye

apart from the competition. Fireve products undergo extensive inspection, fault analysis, and design that tests for every



key component and subassembly to function properly. Product development, applied research and manufacturing are carried out across our global locations and our company headquarters in Derry, New Hampshire, which is fully ISO 9001 certified. Fireye strives to meet customer shipment expectations and is ready to expedite products for emergency situations, when needed.

We are proud of our passion for customer service and are committed to maintaining our high service levels. Fireye's customer service team is available to meet all our customers unique needs. Whether via Fireye or our worldwide network of more than 250 authorized distributors, we can provide technical support and on-site field commission services, if required.

We continue to strive for excellence in providing customer solutions for all possible applications. This commitment to product reliability, manufacturing quality, and ongoing service is what gives Fireye its high degree of customer loyalty. Fireye customers return again and again for new application solutions and upgrades to existing systems.

### **Specialized products** tailored to key markets

Fireye products include a variety of flame scanners, amplifiers, burner accessories, and microprocessor-based control systems. Applications for Fireye products range from single-burner boilers and furnaces used in schools, hospitals, and small commercial properties to the largest multi-burner boilers used in electric power stations, pulp and paper mills, petrochemical refineries, and food processing plants. Our efficiency products offer our customers substantial benefits including fuel savings, emissions reduction and enhanced operational capabilities.







Power Generation

Oil & Gas

Petrochemical







Pulp & Paper

Metals Processing Mineral Processing







Food & Beverage

Waste Management

**HVAC** 







Office Buildings

Schools & Education

Hospitals





Fireye utilizes a vast worldwide distribution network. Our distributors are hand-picked and thoroughly trained in all applicable product lines. On-going training programs assure that each distributor is capable of handling the needs of practically any customer.



Reliable quality and unmatched service from a worldwide network of more than 250+ distributors and representatives gives Fireye customers a level of expertise that can keep their systems operating at peak performance.



Fireye is a leading manufacturer of flame safeguard controls and burner management systems for commercial and industrial applications throughout the world. Our products can be found in a variety of public buildings, commercial properties, power plants, pulp and paper mills, petrochemical facilities and food processing plants. Fireye is a part of Carrier, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

For more information, please visit fireye.com.





