

DIGITAL PROFILE DETECTOR™

THE PATENTED DIGITAL PROFILE DETECTOR (DPD) USES A MICROPROCESSOR TO continuously monitor the frequency and amplitude characteristics of a burner flame. Every flame has a unique profile - a digital fingerprint. The Digital Profile Detector constantly compares the real time flame image to the learned profile stored in its memory. The detector's microprocessor uses sophisticated algorithms to precisely determine the flame's on/off condition, allowing for reliable discrimination in a multi-burner environment.

Depending on customer needs, both the Super-Blue Digital Profile Detector (UV) and the Classic Digital Profile Detector (IR) are available. The Super-Blue features a super-blue silicon cell that is sensitive to radiation prevalent in gas flames and/or oil flames. The Classic incorporates a lead sulfide cell for infrared detection and is best suited for coal and/or oil flames. The automatic signal amplification circuitry and the use of multiple storage files allow each Digital Profile Detector to adapt to each application.

- **SOPHISTICATED SMARTDISPLAY™** -

The scrolling LED display provides quick set-up, precise aiming, and instant flame signal readout.

- **SIMPLIFIED PROGRAMMING AND OPERATIONS** -

With the push button keypad, the detector can be programmed to learn flame data in just minutes.

- **FIBER OPTIC CONNECTIONS** -

For space constricted applications, fiber optics can work through the tightest burner configurations.

- **SIMPLIFIED MAINTENANCE** - In the event of failure, downloading and uploading flame characteristics to a replacement detector head is possible.

- **SAFE OPERATION** - 24 VDC operation.

- **USER FRIENDLY** - Program and view multiple detector's status from a remote PC.

- **OPTIFLAME COMPATIBILITY** - The OptiFlame burner balancing software uses the detector's signal to help fine tune the performance of a burner.



FLAME DETECTORS



Re-powering your world



DIGITAL PROFILE DETECTOR

THE SUPER-BLUE DIGITAL PROFILE DETECTOR

Front Mount: Part #7819506
 Tangential Unit: Part #39089301

THE CLASSIC DIGITAL PROFILE DETECTOR

Front Mount: Part #7819504
 Tangential Unit: Part #39089201

SPECIFICATIONS

Mounting: 1" NPT sight pipe fitting
 3/8" NPT purge air fitting

Material: Die-cast aluminum housing with matte black, anti-slip finish

Electrical: 24 VDC (available from associated Forney Amplifier)

Current Rating: 60mA

Temperature: Super-Blue: -4°F to +131°F
 -20°C to +55°C
 Classic: -4°F to +150°F
 -20°C to +65°C

Humidity: 0-95% Rh-Non-condensing

Weight: 2.4 Lbs. (1.1 Kg)

Cooling Air: 10 SCFM@6" WC (15 SCFM@10" WC with fiber optics)

Approvals: Factory Mutual, CE (Consult factory for system configuration)

Sensor/Wavelength: Super-Blue Model – Super-blue silicon cell / 290 - 390 nm
 Classic Model – Lead sulfide cell / 700-2,500 nm