## COMBUSTION ELECTRONICS

**Products and Capabilities** 



COMBUSTION | BURNERS | CONTROLS | IGNITION SYSTEMS





## Flame Scanners: Integrated. Reliable. Responsive.

Zeeco offers a complete line of integrated flame scanners that provide reliable flame detection, and superior background flame signal suppression for single and multiple burner applications. Each ZEECO® ProFlame<sup>TM</sup> and ProFlame+<sup>TM</sup> model is easy to configure, simple to set up, and uniquely designed for safer operation in hazardous or nonhazardous areas.

The ProFlame is designed for smaller applications and offers an adjustable flame relay pull-in time, service dipswitch, adjust dipswitch, and raw flame signal measuring pins for advanced troubleshooting and signal analysis.

The ProFlame+ is designed for larger applications and has similar features to the ProFlame, with more intricate tuning to discriminate a target flame from a background flame, additional flame relay dropout time, separate flame-on and flame-off threshold settings for the frequency components of the flame signal, and a PC software interface.



Additional Flame Scanner Advantages

- Compact, integrated, and reliable; no external flame amplifier needed
- LED flame status indicators
- Quick-connect adapters allow retrofit of any other major manufacturer's scanner
- · Vortex cooling jackets available for high-temperature environments



Item	ProFlame™			ProFlame+™		
Flame Scanner Model	ZPF-130/230	ZPF-120/220	ZPF-110/210	ZPF-1200	ZPF-1100	Fiber Optic
Sensor Type	UV/IR	UV/IR	UV	UV/IR/Dual	UV/IR/Dual	UV/IR/Dual
Hazardous Area Rating	Safe Area	Zone 2 Class 1, Div 2	Zone 1 Class 1, Div 1	Zone 2 Class 1, Div 2	Zone 1 Class 1, Div 1	Zone 2 Class 1, Div 2
Environmental Protection	IP67 NEMA 4X	IP67 NEMA 4X	IP66 NEMA 4X	IP66 NEMA 4X	IP66 NEMA 4X	IP66 NEMA 4X
Relative Humidity (Noncondensing), %	99.50	99.50	99.50	95.00	95.00	95.00
Vibration Fatigue Limit, G	5	5	5	N/A	N/A	N/A
Fuel Application	Gaseous, Liquid, Solid	Gaseous, Liquid, Solid	Gaseous, Liquid	Gaseous, Liquid, Solid	Gaseous, Liquid, Solid	Gaseous, Liquid, Solid
Purge Air Pressure, In. W.C. (mbar)	5 (12.5)	5 (12.5)	5 (12.5)	5 (12.5)	5 (12.5)	10 (25)
Purge Air Flow, scfm (L/min)	5 (142)	5 (142)	5 (142)	5 (142)	5 (142)	10 (284)
Operating temperature, °F (°C)	-40 to 167 (-40 to 75)	-40 to 167 (-40 to 75)	-4 to 149 (-20 to 65)	-4 to 158 (-20 to 70)	-4 to 158 (-20 to 70)	-4 to 158 (-20 to 70)
Cable	Quick Disconnect	Quick Disconnect	Fixed	Quick Disconnect	Fixed	Quick Disconnect
Mounting	1" NPT M	1" NPT M	1" NPT M	1" NPT F	1" NPT F	N/A
Integral Sealing Window	Yes	Yes	Yes	No	No	N/A
Operating Voltage, VDC	24	24	24	24	24	24
Relay Output, Flame	N.O./N.C.	N.O./N.C.	N.O./N.C.	N.O./N.C.	N.O./N.C.	N.O./N.C.
Analog Output	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA	4-20mA
Power Consumption, W	4	4	4	4	4	4
Certifications	UL, FM, CSA, CE	UL, FM, CSA, CE, INMETRO, IECEX, ATEX	UL, FM, CSA, CE, IECEX, ATEX			
SIL Rating	3	3	3	3	3	3
Weight, lbs (kg)	1.3 (0.6)	1.3 (0.6)	4.2 (2.0)	3.3 (1.5)	8.8 (4.0)	3.0 (1.4)
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## **The Zeeco Difference**



Our only business is the combustion business. By concentrating on what we do best, Zeeco has grown into a worldwide leader in combustion solutions. We are a privately held company whose ownership stays highly involved in daily operations, with upper management comprised of the world's leading combustion experts.

When you call Zeeco, we answer. When you make a request, you get a quick, efficient response. We are lean and efficient, able to make decisions quickly, without bureaucracy and red tape. Our sales, engineering, and purchasing groups work hand-in-hand to deliver highly competitive quotes and heroic turnaround times. We stand ready and willing to travel anywhere in the world to discuss upcoming projects firsthand, and to ensure that every existing project runs seamlessly.



Visit zeeco.com/contact for additional Global Location contact information



Choose to work with our dedicated, flexible, and innovative team, and you won't be disappointed. Call or email us today to request a quote or to learn more about our proprietary combustion systems.

Zeeco Headquarters 22151 East 91st Street Broken Arrow, OK 74014

Learn more at zeeco.com

✓ sales@zeeco.com

✓ +1 (918) 258 8551

**Zeeco Combustion Electronics Group** 

combustion\_electronics@zeeco.com

**L** +1 (918) 893 8596

PT. Heat Transfer Solutions Indonesia Ruko Green Mansion P-10 Ngingas, Waru, Sidoarjo, Indonesia

**≥** sales@pt-htsi.com

**L** +62 (31) 85582243

Certification applies to Zeeco Headquarters.

