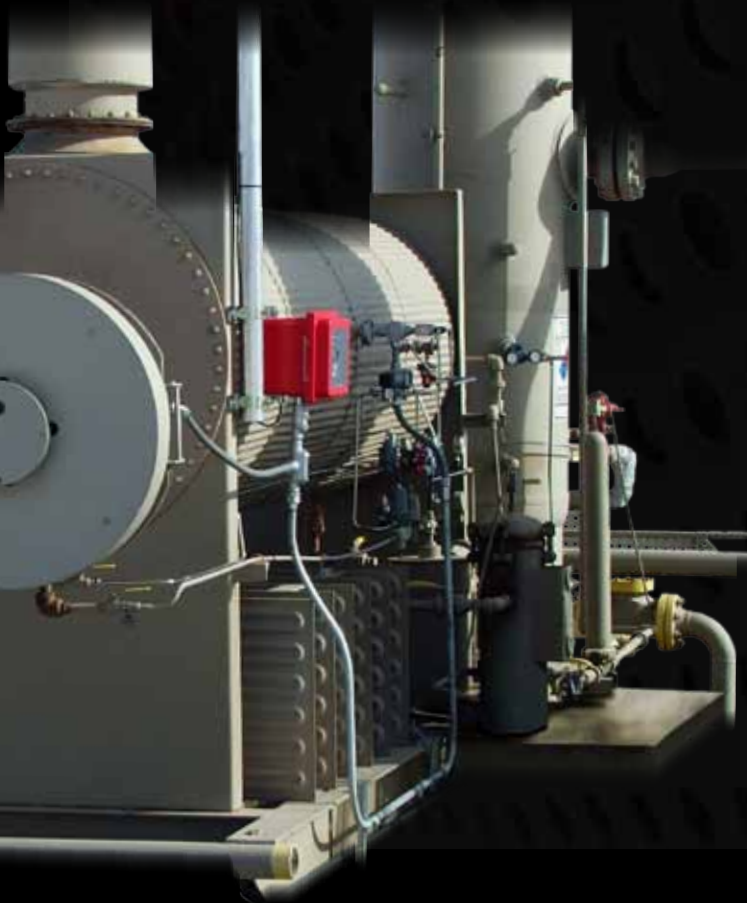




New for 2011!

BMS 300

Burner Management System
HEAVY-DUTY RE-DEFINED



SureFire
Burner Management Systems

Surefire-controls.com

BMS 300

New for 2011!

THE NEWEST MEMBER OF THE AMERICAN-MADE SUREFIRE FAMILY

New for 2011, the BMS 300 is created around a fifth generation controller built for heavy-duty service. It's certified to UL and CSA standards for hazardous areas, has all the sturdy dependability you demand, and carries an outstanding Two Year Warranty. Additionally, the BMS 300 comes ready to work with the newest SureFire FT ignition units, assuring ease of installation, and long life in burners of nearly every size.

The controller and easy to read display are ruggedly designed to operate in ambient temperatures from -40°F to 130°F, and are coated for corrosion resistance. They are surge-protected, mounted in a NEMA 4X enclosure and supplied with a UV-resistant encapsulated keypad. Each unit also includes a built-in voltmeter, function indicator lights. And it has simplified, code-assisted troubleshooting on the front panel.

Every BMS 300 is factory programmed for simplified One Button startup with the industry leading FT Ignition Units. 12 volt DC power is required, and the unit is solar-ready with an improved solar charge regulator.

The system monitors target temperature with an enhanced RTD circuit; and will now manage processes from 0°F to 400°F. Standard programming automatically controls both the pilot and main burner gas valves as necessary, and is designed Fail Safe. Both High Temperature Shut Down and Flame Failure Shut Down are included, and an audible ignition countdown buzzer is standard. The system also offers a compliant fail-safe Run Status / Alarm connection to monitor system control for environmental and regulatory compliance. Standard remote features include temperature indication, and on / off via your RTU/PLC integration.

Optionally, the unit process may be controlled with a user supplied external switch using the Alt Sense input. Multiple connections for additional Standby and Shutdown requirements are also provided. Each unit is pre-configured to perform in either full Pilotless Mode (using an FT2) or Multi-Stage Mode (with FT1).

Every SureFire system passes a rigorous, multi-stage battery of tests, and is available with a matched set of: control solenoids, resistance temperature detector (RTD), flame sensor, fuel loss standby switch, and FT-Series ignition unit.

We are dedicated to providing quality American-made safety control systems for industrial burners. Thousands of hours of critical design, engineering, and field-testing go into every SureFire we build. We feel our systems are the finest available, and after using them, we believe you will agree.



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Burner Management Systems



BMS 300

SUITABLE FOR MOST INDUSTRIAL BURNERS

- No Standing Pilot
- One- or Two-stage
- Flame sensors: Flame Rod, Cad Eye

ALARMS AND SHUTDOWNS

- Ignition Failure Alarm
- Enhanced User Friendly Functionality
- System ON / OFF Indicator Lights
- Igniter ON Indicator Light
- Burner ON Indicator Light
- One Button Startup with FT-1 Igniter
- High Temperature Shut Down
- Flame Failure Shut Down

RTD AND REMOTE OPERATIONS

- Can be operated with RTD or External Switch
- Three Standby Interlocks
- Three Shutdown Interlocks
- Remote On / Off
- Remote Temperature Out with 4-20mA
- Digital Temperature Control with RTD

CONTROLS AND ALARMS

- Run Status Output
- Voltmeter
- Reads Temperature in either F or C
- Hours-On Counter
- Alarm Output
- Error Code assisted Troubleshooting
- Most Common Error codes printed on Front Panel
- Password Protected Setup
- Automatically detects flame sensor failure, RTD failure and Ignitor failure
- Main Valve Failure Indicator
- Audible 120DB buzzer before ignition sequence



NORMAL OPERATING CONDITIONS

Voltage	11-17 volts
Solar Panel Voltage	12-20 volts
Igniter Voltage	13-14 volts adjustable
Igniter Amps	7 amps inrush, 1.5 amps nominal (during ignition only)
4-20 mA Voltage	5-30 volts powered from customer's device
Solar Panel Current	2 amps maximum
RTD Range	0 - 530° F
Process Temperature	0 - 400° F
Actuator Valve	3 amps
System Current Draw	Varies with application
Ambient Temperature	-40 / +130° F

OTHER COMPONENTS

Enclosure	Fiberglass NEMA 4X meets IP66 criteria UL Listed, CSA certified
Solenoid valve	Explosion proof for hazardous location, 12 VDC .85 watt, 120 psi
RTD	Submersible, ½" NPT, 3-wire, Platinum, 100 ohm, .00385, probe rated to 1000 °F
FT Ignition Unit	Includes SureFire Sparkless Igniter, Pilot nozzle and flame sensor



12 Volt DC .27 A, -40 to +131F Temp Range
CLASS I DIV2 GROUPS C, D, T6

Surefire Burner Management Systems

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Made in the U.S.A