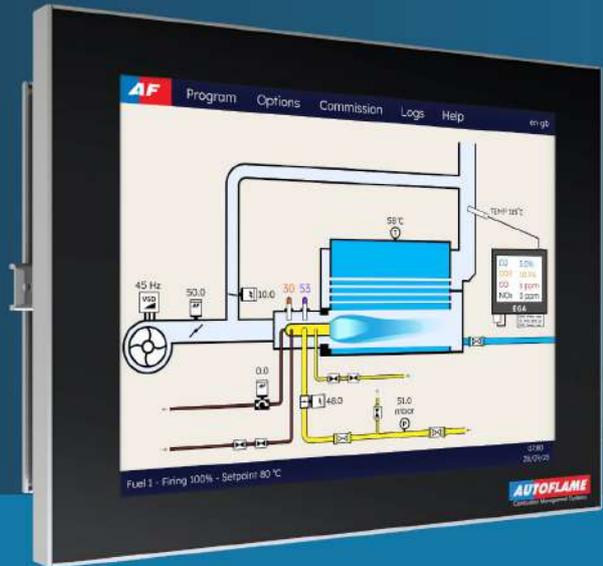


# AUTOFLAME®



## Mini Mk9

Market-leading, micro-modulating system, delivering optimised combustion and reliable burner management for connected and safe boiler rooms.

### Increase Efficiency

Reduce fuel consumption by 7-12% over traditional linkage systems.

### Reduce Costs

Lower maintenance costs with an accurate positioning system.

### Minimise Emissions

Capable of reducing CO<sub>2</sub> emissions by 10%.

### Fully Connected

Wireless, hardwired, Direct Modbus, Direct BACnet. A total BMS solution with remote monitoring, reporting and data storage, accessible on your mobile device via the Mk9 Download Manager App.

### Integrated Automation & Safety Features

Fully automated flame safeguard, valve proving system, VSD control, scheduling, sequencing and other automatic settings already integrated.

### Easy Install & Commissioning

Steel construction, 8" capacitive multi-touch screen with user friendly interface, also available as a control panel package.

### Introducing UV Flame Trim: Patented, unique technology, only available with the Mini MK9!

Unique in the market, the UV Flame Trim takes instantaneous readings from the heart of the flame and communicates them to the Mini Mk9 for combustion trimming – also ensuring that the burner is always firing safely.

### For maximum cost savings and safety, choose our 'Closed Loop Feedback System'

Combine the Mini Mk9 with our patented UV Flame Trim and Mk8 EGA EVO (measures up to six exhaust gases) to achieve continuous and instant combustion trimming for maximum efficiency and safety, along with increased reliability and plant lifespan.

W: [autoflame.com](http://autoflame.com)

W: [fiammac.com](http://fiammac.com)

**MADE IN BRITAIN**®

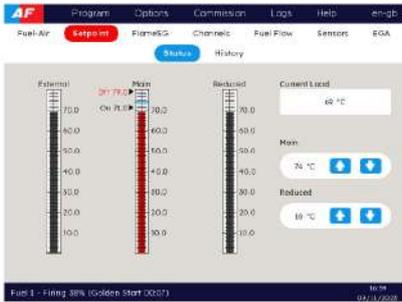


[info@fiammac.com](mailto:info@fiammac.com)

[G.fiammac@gmail.com](mailto:G.fiammac@gmail.com)

2022

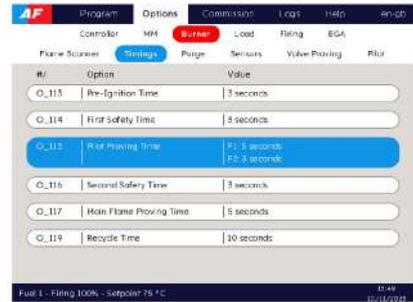
There are many interactive control and reporting screens accessible in every Mini Mk9 controller (no further modules needed). Autoflame systems have been installed on tens of thousands of burners



Setpoint



Single Point Change



Redefined Options

### Feature Set

The following features come as standard on the Mini Mk9:

FEATURE	DETAILS
Screen size	8" Capacitive Multi Touch
Flame Safeguard	Built-in. Can also be operated as a Flame Safeguard only system unit
Fuel-Air Ratio Control	Automatic, Low Flame Hold, Hand Mode, Enable/Disable Burner, Stage Firing, Change on the Fly (COF)
Channels	3 Servos, 1 VSD, 1 PWM Fan
Fuel Curves	2 Independent Fuel Curves – Dual Fuel and COF ready
Commissioning	Up to 20 interpoints, plus Open, Closed, Golden Start, FGR Start and Purge Positions
Setpoint Control	Standard, Reduced, External, Outside Temperature Compensation (OTC), Setpoint Programmes
VPS (Gas Valve Proving)	Available on 2 separate gaseous fuels
Gas and Air pressure	Monitoring and Proving
Flame Scanners	UV, IR, Ionisation, Flame Switch, UV Trim, Dual scanner options with AND/OR functionality
Programmable Inputs	3 Burner Control and 1 FAR Control-User Programmable Inputs
Scheduling	Up to 2 Run Time Schedules & 10 Set Point Programmes
IBS/Lead Lag Sequencing	Built into each MM controller
Fuel Flow Metering	Instantaneous and Totalised, now possible through 4-20mA Mass Flow input
FGR (Flue Gas Recirculation)	Servo control with configurable FGR Start position
Outside Temperature Compensation	Using OTC module or Internet Weather Data
VFD Management	Single 4-20mA/0-10V VSD
PWM Fan	Direct Control with Feedback
Trim Control	3- Parameter-Trim with an EGA, UV Trim with a UV Scanner and EGA/O <sub>2</sub> probe O <sub>2</sub> Trim with a third-party O <sub>2</sub> Probe/Analyser
Emissions Monitoring & Reporting	With a Mk8 EGA EVO
Logs	Unlimited logs for System, Lockouts, Errors, Alarms, and Warnings
Security	Password Protected for Commission and Online Changes
Commission Data Backup	Wireless Connectivity through Download Manager App
Connectivity	Wireless and Ethernet Connections
BMS System Control	Via Modbus or BACnet
Graphics	Customisable with Several Boiler Design Options
Language Support	English (UK &US), Chinese, Spanish + more
Connectors	Colour-Coded plugs for Easy Wiring
Upgrade	Housing Aperture same as Mini Mk8 for Easy Upgrade
Technical Manual	Built-in
Approvals	UKCA, CE, UL, AGA, SIL 3
Options	Fuel-Specific and Searchable Options
First Outs	Up to 3 First Out Annunciation Terminals



Mk9 Download Manager App

New with the Mini Mk9, the app can transfer MM settings between units, enabling easy upgrades and software updates.

### Talk To Us:

**Tom Garrett** - Senior Technical Account Manager North America  
E: tgarrett@autoflame.com

**Guillermo Ceba** - Technical Account Manager for Hispano & Lusosphere Countries  
E: gceba@autoflame.com

**Zekeng Liang** - Business Development Manager, China  
E: zliang@autoflame.com

**Nadeem Iqbal** - Business Development Director  
E: niqbal@autoflame.com

**Mary Obah** - Multilingual Executive Account Manager  
E: mobah@autoflame.com