

Monitor up to 10 Boilers Remotely

Modbus/LAN/Remote Connectivity • Save Data for 2 Years

Overview

The DTI (Data Transfer Interface) lets users know in real time how the boilers are performing, either on-site through its built-in touch screen, via a local PC, or via a BMS system. It stores data history of all boilers for 2 years.

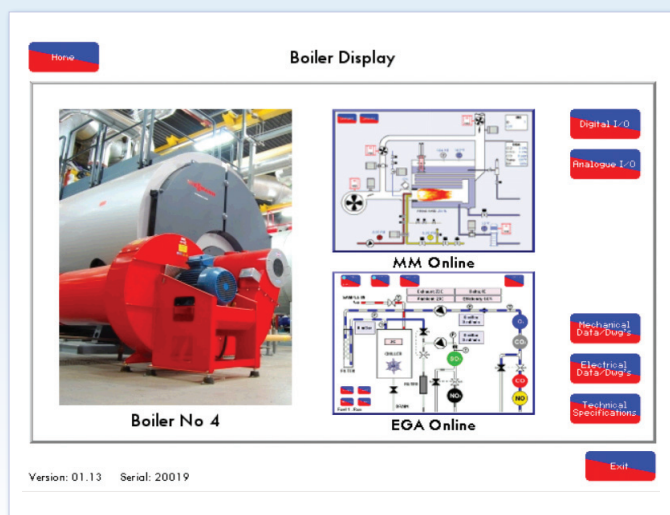
The DTI is a gateway for communicating with the Autoflame MM Controller/EGA range of products. The DTI can collect and store information from a maximum of 10 Autoflame Systems in one location. The information gathered is later available for transmission to an external source such as a BMS via RS422 or Ethernet links. The data gathered by the Autoflame DTI can be synchronised and viewed using the included CEMS (Continuous Emissions Monitoring) software, which allows data collection over a local network or over the internet. The Mk7 DTI also supports the Modbus protocol over ethernet and RS422 as standard.

Main Features

The DTI can collect information from up to 10 of each of the following Autoflame products:

- Mk7 MM Controller, Mini Mk8 MM Controller, Mini Mk7 MM Controller, or any combination to a total of 10 units
- Autoflame Exhaust Gas Analyser, either used in conjunction with an MM Controller for trim, or linked directly to the DTI for monitoring purposes only
- Up to 10 Input/Output modules with both analogue and digital connections

There are up to 150 items of information that are viewable via the DTI from each MM Controller & EGA.



EGA Information (Viewable & Stored within the DTI for 2 Years)

- O₂ , CO₂ , CO, NO, SO₂ & NO₂ percentile & ppm values
- Exhaust temperature, combustion efficiency, fuel consumption & emissions auditing data
- EGA error conditions
- Flow-metering & on-line Exhaust Gas Analysis data, both instantaneous & totalised for: O₂, CO₂, H₂O, NO, CO, SO₂, N₂, total emissions as a weight, & corresponding volume at exhaust exit temperature & pressure
- Heat input, heat loss & net useful heat
- Net efficiency, gross efficiency & temperature change
- Fuel flow per hour & fuel flow totalised
- Calculated cost of fuel used (cost per tonne)

DTI Input Values

The following settings may be modified in individual MM Controllers via the DTI:

- Alter setpoint (individual & global)
- Enable/disable burner
- Re-order boiler sequencing & select lead boiler
- Input/Output labelling & control
- Remote load index control

Connectivity

The Autoflame network operates using a two-core screened cable. The DTI assesses each item on the network periodically, storing up-to-date information on the DTI & outputs to defined Modbus addresses. These are then available to third party systems. The DTI features dedicated data ports for RS422 & Ethernet connections. The 10.4" touch-screen displays the operational status of the DTI's communications, with corresponding error conditions in the event of a communication failure.

Autoflame CEMS Audit Software Manager/Supervisor

- Customizable site layouts, boiler images, site naming, ancillaries, mechanical & electrical drawings
- Ability to view live streamed data through a Mk7 MM Controller screen & EGA screen
- Remote or local control
- Remote connection to DTI over internet or LAN

The data is sampled at 1 minute intervals & stored on an SD Card within the Mk7 DTI and within the EGA.



MM Controller Data (Viewable & Stored within the DTI for Two Years):

- Required and actual boiler temperature or pressure
- Burner firing rate (%)
- Fuel selected & flow metering values
- Auto/Hand/Low flame hold operation
- Number of control channels optioned showing both actual & commissioned positions
- Maximum/minimum set point accepted from DTI
- Sequence status (on, stand-by, warm, off) & lead boiler status
- Enable/disable status & error conditions
- Alarm status
- First out annunciation*
- Draft control*

Flame Safeguard Functions

- Burner firing status (off, firing, purge, ignition, off line)
- Hours run & number of start-ups
- Lockout status
- Gas pressure (online & commissioned)
- Oil pressure (online & commissioned)
- Air pressure (online & commissioned)

Water Level Control Functions

- Operational information: steam and feedwater*
- Temperature, pump status and valve position*
- Probe information: temperature, signal value*
- Steam flow metering data*

* Requires Mk7 MM Controller with Expansion Board

A variety of configurations are available, including the ability to monitor multiple DTI's from a single PC (requires additional products). Contact Autoflame or your local technology centre for more information.

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DTI Mk7: Data Transfer Interface

AUTOFLAME