Mini8®

MODEL

invensys

Eurotherm

8 Loop Plastics Controller
Specification Sheet

- 8 precision PID loops
- Alarm management
- Heater failure detection
- Modbus RTU
- DeviceNet network
- Profibus DP network
- CANopen
- Modbus TCP

The Mini8® Plastics Controller is a pre-configured version of the standard Mini8 multiloop and data acquisition unit. It can control up to 8 temperature zones, each configurable as heat only or heat-cool. The Eurotherm® cooling algorithm can be optimised for fan or water cooling ensuring optimum control even at high extruder speeds.

The Mini8 controller can multi-drop on either Serial, Fieldbus or Ethernet communications and offers a cost effective alternative to performing control loops in a PLC. By devolving control to the Mini8 instrument the PLC can concentrate on providing fast and effective logic control without the processing burden of running complex control algorithms. Relieving the PLC of these functions can significantly reduce the total system cost including PLC hardware, signal conditioners, configuration and commissioning.

The standard configuration supports 8 thermocouple inputs defaulted to type J and 16 logic outputs for driving solid state relays. An optional current transformer input module can be fitted to provide rapid detection of a heater load failure, overcurrent as well as SSR short or open circuit. This feature ensures that action can quickly be taken to rectify a fault therefore minimising downtime and improving product yields.

The standard plastics configuration can be customised to a specific application by using the Eurotherm® iTools Graphical Wiring Editor.

For detailed technical information on the Mini8 controller please refer to Specification sheet HA028480.
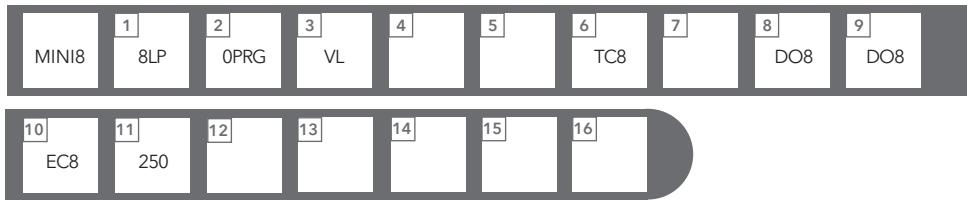
VT505 Operator Panel

The Eurotherm VT505 Touchscreen operator panel can be used to supervise multiple Mini8 controllers. The VT505 can be ordered pre-configured to support Mini8 instrument applications of up to 32 control loops and provides an ideal operator interface for monitoring and changing process parameters.

Although compact the VT505 is constructed in a rugged pressed aluminium case. Its IP65 panel rating makes it ideal for harsh environments.
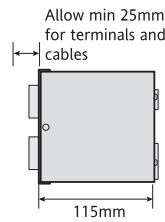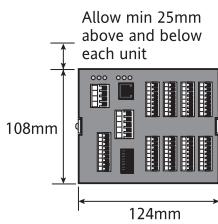
Compatible with any Modbus RTU product such as the Mini8, and many other Eurotherm products, it can also be used as an operator display into programmable logic controllers.

- 5.7" Touchscreen LCD
- Standard operator views
- Recipe management
- Alarm indication
- Heater status
- IO Diagnostics

Mini8 Plastics controller ordering code

	1	2	3	4	5	6	7	8	9
MINI8	8LP	0PRG	VL			TC8		DO8	DO8

10	11	12	13	14	15	16
EC8	250					

Basic Product
MINI8	Mini8 Controller

1 Control Loops
8LP	8 Control loops

2 Programs
0PRG	No programs

3 PSU
VL	24V dc

4 Communications
MODBUS	Modbus RTU
ISOLMBUS	Isolated Modbus RTU
DEVICENET	DeviceNet
PBUSRJ45	Profibus RJ45
PBUS9PIN	Profibus 9 Pin 'D' type
ENETMBUS	Ethernet Modbus/TCP
CANOPEN	CANopen
DNETM12	Enhanced DeviceNet

5 Temperature Units
C	Centigrade
F	Fahrenheit

7 IO Slots 2
XXX	No module fitted
CT3	3 Ch CT input

10 Application
EC8	8 Loop plastics controller

11 Wires
250	250 User Wires

12 Recipes
NONE	No recipes
RCP	8 Recipes

Note
1. CERT2 is 5 point calibration.

13 Manual Language
ENG	English
FRA	French
GER	German
SPA	Spain
ITA	Italian

14 Configuration Software
NONE	No CD
ITOOLS	iTools CD & Mini8 Controller documentation

15 Warranty
XXXXX	Standard
WL005	Extended

16 Calibration Certificates
XXXXX	None
CERT1	Certificate of Conformity
CERT2	Factory input calibration per input (Note 1)

VT505 Operator panel ordering code

	1	2	3	4	5	6
VT505						NONE

Basic Product
VT505	Monochrome touch screen, 320 x 240 pixels

1 Type
MINI8	Configuration for Mini8 Controller

2 Applications
EC8	8 loop plastics controller
EC16	16 loop plastics controller
EC24	24 loop plastics controller
EC32	32 loop plastics controller

3 Network Cables
NONE	No cable supplied
F485	Modbus EIA485 (Note 1)
F232	Modbus EIA232

4 Manual Language
ENG	English
FRA	French
GER	German

Notes
1. Modbus EIA485 cable required for use with Mini8.
2. Config cable supplied with VTWIN software.

5 Configuration Software
NONE	No configuration software
VTWIN	VTWIN configuration software (Note 2)

6 Config. Software Language
NONE	Multi-language

Mini8 Controller Mechanical Details

Allow min 25mm above and below each unit

108mm

124mm

Allow min 25mm for terminals and cables

115mm
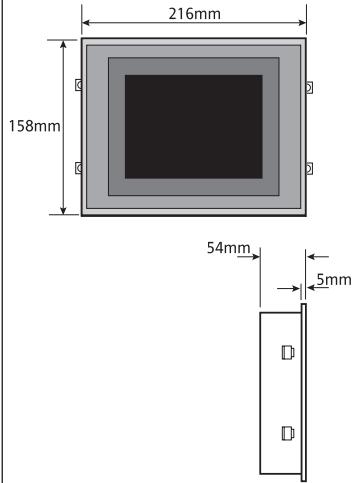
Mounting Information
The Mini8 controller is intended to be horizontally mounted on symmetrical DIN Rail to EN50022-35 or 35 x 35 x 15

VT505 Operator panel Mechanical Details

216mm

158mm

54mm

5mm

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Operations Management