

## Mini8® Loop Controller Release number HA033672-8



The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation, and testing of the products with respect to the relevant specific application or use thereof. Neither Watlow Electric Manufacturing Company nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Contents

1	Changes .....	2
1.1	Changes in version V6.01 .....	2
1.2	Changes in version V5.27 .....	3
1.3	Changes in version V5.25 .....	3
1.4	Changes in version V5.21 .....	4
1.5	Changes in version V5.20 .....	5
1.6	Changes in version V5.15 .....	5
1.7	Changes in version V5.10 .....	6
1.8	Changes in version V5.04 .....	6

## 1 Changes

### 1.1 Changes in version V6.01

**Release Date:** February 2025

**New Features:**

EtherNet/IP now available.

**Security Updates:**

None in this release.

**Compatibility Notes:**

- This release will not support the migration of legacy pre V5.25 Mini8 EtherCAT configuration clone files. There is no backward compatibility past V5.25
- It should be noted that the upgrade of existing units running firmware pre V5.25 are not supported in the field.  
To upgrade a pre V5.25 Mini8 unit to V6.01 will require the return off the unit to the nearest Eurotherm service centre.

**Items Resolved:**

Ticket	Summary
EXT-6473	Port fix of E3500-724 AM PV spikes when running serial comms
EXT-6512	Ethernet variant MINI8 powered up with rotary switch set to 0xFF does not go into upgrade mode
EXT-6376	MINI8 goes into standby with "NVOL parameter database load/store was unsuccessful"
EXT-6663	EtherCAT task should actively place loops in safe state at startup (INIT)

# Release Notes



## 1.2 Changes in version V5.27

**Release Date:** September 2024

**New Features:**

Maintenance release only.

**Security Updates:**

None in this release.

**Compatibility Notes:**

- This release will not support the migration of legacy pre V5.25 Mini8 EtherCAT configuration clone files. There is no backward compatibility past V5.25
- It should be noted that the upgrade of existing units running firmware pre V5.25 are not supported in the field.  
To upgrade a pre V5.25 Mini8 unit to V5.27 will require the return off the unit to the nearest Eurotherm service centre.

**Items Resolved:**

Ticket	Summary
MINI8-1071	Remove NVOL writes from interrupt service routines
MINI8-2	NaN PV Generation and Management implemented
EXT-6473	EtherCAT goes into standby with "Invalid RAM image of NVOL"
EXT-6323	I/O cards taken from a Mini8 V5.x report as not calibrated when fitted to a unit running V3.x
EXT-6502	EtherCAT TC Anomaly in Parse Wiring Algorithm to Validate Associations
EXT-6470	Shock chamber TC4 issue, at over high temperatures causes invalid input reading

## 1.3 Changes in version V5.25

**Release Date:** March 2024

**New Features:**

Firmware Signing, Serial Upgrade Tool, EtherCAT FoE.

**Security Updates:**

None in this release.

**Compatibility Notes:**

- This release will not support the migration of legacy Mini8 EtherCAT configuration clone files. There is no backward compatibility.
- It should be noted that the upgrade of existing units running firmware pre V5.25 are not supported in the field.  
To upgrade a pre V5.25 Mini8 unit to V5.27 will require the return off the unit to the nearest Eurotherm service centre

Watlow, Eurotherm, EurothermSuite, EFit, EPack, EPower, Eycon, Chessell, Mini8, nanodac, piccolo and versadac are trademarks and property of Watlow its subsidiaries and affiliated companies. All other trademarks are the property of their respective owners.  
© Watlow Electric Manufacturing Company, all rights reserved

**Items Resolved:**

Ticket	Summary
MINI8-937	IO PV status doesn't match ENUM_PVStatus.h
MINI8-946	3500e Stops writing values at first block invalid write
MINI8-982	Different ESI Filename for SIMULATION and REAL device with the same Clone File
MINI8-798	TimeDP parameter should be cloneable
MINI8-955	Enumerated user OD parameter with only one enumeration Off(1) fails to load in TwinCAT.
MINI8-961	Mini8 CommsTab not displayed correctly in iTools
MINI8-972	Unwired CommsTab entry should not default to SCADA table mapping when using DeviceNet
MINI8-973	Align enumeration mapping between IO and EPC alarms
MINI8-974	Fix sensor break value fluctuation
MINI8-978	Fix calculated checksum 0xFBFB3
MINI8-979	EtherCAT 0xFBFB3 checksum method conflict between ESI and device
MINI8-1007	Empty Recipe Synchronisation Instructions Causing Server Error
MINI8-1015	Make IO.Mod.x.ElectricalFormat alterable in Configuration mode

## 1.4 Changes in version V5.21

**Release Date:** February 2024

**New Features:**

Maintenance release only.

**Security Updates:**

None in this release.

**Items Resolved:**

Ticket	Summary
EXT-6305	PDO writing out-of-range values to 0x7000:11 Loop TSP should not require MINI8 reset
MINI8-885	EtherCAT master reports "No valid firmware" fault code 14

## 1.5 Changes in version V5.20

**Release Date:** July 2023

**New Features:**

Support for EtherCAT (ETG.5003.2060)

**Security Updates:**

None in this release.

**Items Resolved:**

Ticket	Summary
EXT-5961	Communications Tab warning, when downloading migrated clone file
MINI8-692	Modbus Client: Mini8 profile predefined parameter not being scaled properly
EXT-5950	CurrentMonitor settings previously configurable in Legacy Mini8 are not available in current Mini8

## 1.6 Changes in version V5.15

**Release Date:** November 2022

**New Features:**

Maintenance release only.

**Security Updates:**

None in this release.

**Items Resolved:**

Ticket	Summary
EXT-5928	TC4/TC8 input parameter values go to NaN after exit from configuration mode
EXT-5937	Unable to read alarm status value register via Modbus Comms due to incorrect data format
EXT-5913	Incorrect Modbus addresses displayed in iTools
EXT-6010	Assigned scaled integer Modbus addresses to LIN32 instances 5 to 8
MINI8-413	Modbus Master parameters are now loaded from the clone file
MINI8-468	SCADA address reference table now references missing cells
MINI8-433	Improved parameter help
MINI8-787	Config Clip connection on cold-start is being unloaded by iTools

# Release Notes



## 1.7 Changes in version V5.10

**Release Date:** June 2022

**New Features:**

Maintenance release only.

**Security Updates:**

None in this release.

**Items Resolved:**

Ticket	Summary
MINI8-634	Increase CommsTab Modbus upper limit
MINI8-506	Corrupt custom Lin Tables during clone creation at PLATE
MINI8-639	FRAM read issue

## 1.8 Changes in version V5.04

**Release Date:** January 2022

**New Features:**

New Product first release.