JX3-THI2-RTD

Version Update from V 1.02 to V 1.03



Version Update



Version 1.01

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1 Introduction

Introduction

This chapter shows the history of the JX3-THI2-RTD module's operating system versions.

Operating System Update - Why?

An OS update allows you to:

- Expand the function range
- Fix software bugs
- Transmit a certain operating system version, for example at releasing a customer-specific operating system version

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Operating System Update

OS File for Operating System Update

For an operating system update, you will need the following file:

OS File	Description
JX3-THI2-RTD_1.03.0.00.os	Operating system file for JX3-THI2-RTD with version 1.03.0.00.

OS File Download

Jetter AG make operating system files available for download from their **homepage at http://www.jetter.de**. OS files can be found via quicklink on the support site of the JX3-THI2-RTD module.

Operating System Update by means of JetSym

To update your OS proceed as follows:

Step	Action	
1	OS File Download from www.jetter.de	
2	Establish a connection between PC and controller	
3	Execute the menu item Build > Operating System Update in JetSym	
4	Select the OS File	
5	Depending on the controller and on the module, the following items are to be specified: Module number Submodule socket Slave number I/O module number	
6	Start the operating system update by ok	
7	Result:	
	After power cycling, the new operating system starts.	

Version Update Overview - JX3-THI2-RTD Module

V 1.03.0.00

The following table gives an overview of newly added features and fixed software bugs in OS version 1.03.0.00:

Function	New	Fixed
JX3-THI2-RTD:		
With the sensor disconnected, the forcing function returned the value 0 and "Error". Now, forcing works properly - values can be simulated for a channel that is not used.		✓
Faster response to system bus requests. If a great number of JX3 modules was connected to a controller, the module JX3-THI2-RTD responded too slow.		√
The response time after the module is powered up has been reduced.	✓	
Module registers 1100 and 1200 have been expanded from 16 to 32 bits.	✓	
The following functions have been added:		
Cable breakage detection		
Short-circuit detection		
Deficient temperature		
Excess temperature		

2 Expansions

Introduction

Jetter AG are continuously striving to add new features and functions to the JX3-THI2-RTD module. By updating your OS you are given the possibility to enhance the functionality of your module. To do so, you need the following ...

- an OS file
- the JetSym software tool
- a connection between PC and controller

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Module registers 1100 and 1200: expansion to 32 bits

Status

In the case of versions < 1.03.0.00 the width of module registers 1100 and 1200 for indicating the relevant channel status was 16 bits.

Errors were indicated in the status register (for both channels simultaneously). To date it was not possible to directly evaluate what problem a channel had.

Expansion of Module Register 1y00 (y = 1 ... 2)

Module registers 1100 and 1200 have been expanded from 16 to 32 bits. Bits 0 \dots 15 remained unchanged. The following has been added:

Bit	Description
16	Cable breakage - channel y
17	Short circuit - channel y
18	Deficient temperature - channel y
19	Excess temperature - channel y

The status can be reset in the related MR 1y01 (y = 1 ... 2) using command 6.

Faster averaging after power-up or mode switching

Description

After power-up the module JX3-THI2-RTD needed up to 40 seconds to display the first valid measured value.

Affected Versions/Revisions

The following revisions of the JX3-THI2-RTD are affected by this bug:

OS version	< 1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable

Remedy / Workaround

There is no remedy for affected versions/revisions.

Bug Fix

Starting from the following revision of the JX3-THI2-RTD this bug has been fixed:

OS version	1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable

Switching between PT100/PT1000	approx. 8 s
Switching between 2/3/4-wire measuring	approx. 8 s

3 Fixed Software Bugs

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This chapter describes the software bugs which have been fixed in the new operating system release.

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Forcing did not worked properly

Effects of this Bug

With the sensor disconnected (e.g. channel 1 with sensor, channel 2 without sensor) the module failed to display the value in spite of activated forcing function.

(Display 0.0000) + Error, red LED D2 indicating that the sensor has been disconnected.

Affected Versions/Revisions

The following revisions of the JX3-THI2-RTD are affected by this bug:

OS version	< 1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable

Remedy / Workaround

There is no remedy for affected versions/revisions.

Bug Fix

Starting from the following revision of the JX3-THI2-RTD this bug has been fixed:

OS version	1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable

Timeout in the case of register access via JX3 system bus

Effects of this Bug If a controller is equipped with a great number of modules, the module

JX3-THI2-RTD fails to respond to a frame in time. A timeout occurs.

Affected Versions/Revisions

The following revisions of the JX3-THI2-RTD are affected by this bug:

OS version	< 1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable

Remedy / Workaround

There is no remedy for affected versions/revisions.

Bug Fix

Starting from the following revision of the JX3-THI2-RTD this bug has been fixed:

OS version	1.03.0.00
Hardware revision	not applicable
Configuration or operating mode	not applicable