



JX3-THI2-RTD

Version Update from V. 2.01 to V. 2.04

We automate your success.

Revision 1.00

October 2015 / Printed in Germany

This document has been compiled by Jetter AG with due diligence, and based on the known state of the art.

In the case of modifications, further developments or enhancements to products shipped in the past, a revised document will be supplied only if required by law, or deemed appropriate by Jetter AG. Jetter AG shall not be liable for errors in form or content, or for missing updates, as well as for damages or disadvantages resulting from such failure.

The logos, brand names, and product names mentioned in this document are trademarks or registered trademarks of Jetter AG, of associated companies or other title owners and must not be used without consent of the respective title owner.

Table of Contents

1	Introduction	4
	Updating the operating system	5
	JX3-THI2-RTD version update - Overview	6
2	Fixed software bugs	8
	Fixed software bug of the A/D converter	9

1 Introduction

Introduction

This chapter shows the history of OS versions.

Operating system update - Why?

An OS update lets you enhance the functionality of your device by

- adding new functions
 - fixing software bugs
 - installing an OS of a specific version after its release
-

Contents

Topic	Page
Updating the operating system	5
JX3-THI2-RTD version update - Overview	6

Updating the operating system

OS file for an operating system update

For an OS update, you will need the following file:

OS file	Description
JX3-THI2-RTD_2.04.0.00.os	Operating system file for JX3-THI2-RTD with version 2.04.0.00.

Downloading the OS file

Jetter AG make OS files available for download from their **homepage** <http://www.jetter.de>. OS files can be found in the support area. Another option is to follow the quick link on the JX3-THI2-RTD page.

OS update by means of JetSym

To update the OS, proceed as follows:

Step	Action
1	Download the OS file from www.jetter.de .
2	Establish a connection between PC and controller.
3	In JetSym, navigate to menu item "Build", then click "Update OS...".
4	Select the OS file.
5	Depending on the controller and the module the following information has to be entered: <ul style="list-style-type: none"> ▪ Module number ▪ Submodule position ▪ Slave number ▪ I/O module number
6	Start the operating system update by clicking OK.
7	Result: Following Power OFF/Power ON the new OS is launched.

JX3-THI2-RTD version update - Overview

V. 1.03

The following table gives an overview of newly added features and fixed software bugs in OS version 1.03:

Function	New	Fixed
JX3-THI2-RTD:		
The forcing function returned the value "0" and "Error" when the sensor was unplugged. Now, the forcing function works correctly: it lets you simulate values for a channel which is not in use.		✓
The module JX3-THI2-RTD responds faster to requests from the system bus. If a great number of JX3 modules was connected to a controller, the module JX3-THI2-RTD responded too slowly.		✓
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: No-load (cable breakage) Short circuit Deficient temperature Overtemperature	✓	

V. 1.04

The following table gives an overview of newly added features and fixed software bugs in OS version 1.04:

Function	New	Fixed
JX3-THI2-RTD:		
If the temperature was below 0 °C, the module JX3-THI2-RTD deleted collective bit 16 in MR 0.		✓
Wrong temperature in three-wire mode, channel 2		✓

V. 2.00

The following table gives an overview of newly added features and fixed software bugs in OS version 2.00:

Function	New	Fixed
JX3-THI2-RTD:		
Collective bit 21 in module register 0 has been added	✓	
Changes to MR 1y00	✓	
Changes to MR 1y01	✓	
Module register 1y22 has been added	✓	
Module register 1y30 has been added	✓	
Changes to the features "Limits" and "Slave pointer"	✓	

V. 2.01

The following table gives an overview of newly added features and fixed software bugs in OS version 2.01:

Function	New	Fixed
JX3-THI2-RTD:		
Enhanced no-load (cable breakage) and short-circuit detection	✓	
Error detection has been debounced	✓	
Automatic reset of collective bits 17 through 20 in MR 0	✓	
Command 113 automatically resets the error message	✓	
New averaging algorithm for cable resistance measurement	✓	
Bit 16 in MR 1y00 could not be reset		✓

V. 2.04

The following table gives an overview of newly added features and fixed software bugs in OS version 2.04:

Function	New	Fixed
JX3-THI2-RTD:		
Fixed software bug of the A/D converter		✓

2 Fixed software bugs

Introduction

This chapter describes the software bugs which have been fixed in the new OS version.

Contents

Topic	Page
Fixed software bug of the A/D converter	9

Fixed software bug of the A/D converter

Symptoms

In (the slowest) precision mode, incorrect measuring values can occur caused by overflow under the following conditions: Mere resistance measuring outside the ranges listed below:

- For PT100: 18 ... 391 Ω
- For PT1000: 185 ... 3,905 Ω

In the specified temperature range (-200 °C ... 850 °C) of the respective sensors, no problem occurs.

The tolerance towards EMI disturbances has been increased on the digital part. A cable break is detected earlier.

Affected versions/revisions

The following versions/revisions are affected by this bug:

OS version	< 2.04.0.00
Hardware revision	Not relevant
Configuration or operating mode	Not relevant

Remedy/workaround

There is no remedy for the affected versions/revisions.

Remedy

Starting from the following versions/revisions this bug has been fixed:

OS version	2.04.0.00
Hardware revision	Not relevant
Configuration or operating mode	Not relevant

Jetter AG
Graeterstrasse 2
71642 Ludwigsburg | Germany

Phone +49 7141 2550-0
Fax +49 7141 2550-425
info@jetter.de
www.jetter.de

We automate your success.