

## **Release Note**

# **SERIAL-PROFIBUS-INTERFACE | SPI 3**

**Date: 27 June 2008**

## 1. History

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### Modifications in Release 19

Release 19 has been extended by a customer-specific SartoCheckExt module.

All Release 18 modules are compatible.

### Modifications in Release 18

Troubleshooting of a Release 17 failure.

A failure during initialisation of SPI3 could cause a PLC STOP by using the following MODBUS modules.

MODBUS\_Prm\_\_\_\_2W\_i/o

MODBUS\_Prm\_\_\_\_4W\_i/o

### Modifications in Release 17

Release 17 has been extended by a customer-specific SartoCheck module.

All Release 16 modules are compatible.

### Modifications in Release 16

#### *Module Overview:*

All Release 13 modules are compatible.

#### MODBUS RTU

Module Name	I/O Field	Description
MODBUS_Master + Channel	4 words	Specific SPI3 parameter with 4-word data channel
MODBUS_Master_Head	-	Specific SPI3 parameter, no data channel
MB_REG_WRITE_1B	1 byte	Specific parameter module, such as: Function (Read/Write) and size of the respective part of the field device MODBUS registry to be mapped. You can set the various MODBUS functions for the selected module via parameterization (see User Manual).
MB_REG_WRITE_1W	1 word	
MB_REG_WRITE_2W	2 words	
MB_REG_WRITE_4W	4 words	
MB_REG_WRITE_8W	8 words	
MB_REG_WRITE_16W	16 words	
MB_REG_READ_1B	1 byte	
MB_REG_READ_1W	1 word	
MB_REG_READ_2W	2 words	
MB_REG_READ_4W	4 words	
MB_REG_READ_8W	8 words	
MB_REG_READ_16W	16 words	

**The SPI 3 supports the following MODBUS functions:**

- Function 1     Read Coil Status
- Function 2     Read Input Status
- Function 3     Read Holding Registers
- Function 4     Read Input Registers
- Function 5     Force Single Coil
- Function 6     Preset Single Register
- Function 15    Force Multiple Coils
- Function 16    Preset Multiple Register

**Modifications in Release 14 - 15**

***Module Overview:***

Releases 14 and 15 have been developed for OEM partners.

**Modifications in Release 13**

***Module Overview:***

All Release 12 modules are compatible.

**MODBUS RTU**

<b>Module Name</b>	<b>I/O Field</b>	<b>Transfer Protocol</b>
MODBUS_ex_bit_2W_i/o	2 words	MODBUS RTU
MODBUS_ex_bit_4W_i/o	4 words	MODBUS RTU
MODBUS_ex_bit_8W_i/o	8 words	MODBUS RTU
MODBUS_ex_bit16W_i/o	16 words	MODBUS RTU
MODBUS_ex_bit32W_i/o	32 words	MODBUS RTU
MODBUS_ex_bit64W_i/o	64 words	MODBUS RTU

## Modifications in Release 12

### Module Overview:

All Release 11 modules are compatible.

### ASCII | 3964R | RK512

Module Name	I/O Field	Transfer Protocol
ASCII_Prm+_+_2W_i/o	2 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+_+_4W_i/o	4 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+_+_16W_i/o	16 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+_+_32W_i/o	32 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+_+_64W_i/o	64 words	Free ASCII driver, 3964R, RK512

The following modules are exclusively for manufacturer-specific applications.

Datalogic_DPD__8i/8o	8 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DPD__12i/8o	12 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DPD__16i/8o	16 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DPD__20i/8o	20 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DPD__24i/8o	24 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DPD__32i/8o	32 bytes	Free ASCII driver (PROFIBUS)
Datalogic_DAD__8i/8o	8 bytes	Free ASCII driver (ANYBUS)
Datalogic_DAD__12i/8o	12 bytes	Free ASCII driver (ANYBUS)
Datalogic_DAD__16i/8o	16 bytes	Free ASCII driver (ANYBUS)
Datalogic_DAD__20i/8o	20 bytes	Free ASCII driver (ANYBUS)
Datalogic_DAD__24i/8o	24 bytes	Free ASCII driver (ANYBUS)
Datalogic_DAD__32i/8o	32 bytes	Free ASCII driver (ANYBUS)

### MODBUS RTU

Module Name	I/O Field	Transfer Protocol
MODBUS_Prm___2W_i/o	2 words	MODBUS RTU
MODBUS_Prm___4W_i/o	4 words	MODBUS RTU

The SPI 3 supports the following MODBUS functions:

Function 1	Read Coil Status
Function 2	Read Input Status
Function 3	Read Holding Registers
Function 4	Read Input Registers
Function 5	Force Single Coil
Function 6	Preset Single Register
Function 15	Force Multiple Coils
Function 16	Preset Multiple Register

## Modifications in Release 11

### *Module Overview:*

All Release 10 modules are compatible.

### ASCII | 3964R | RK512

Module Name	I/O Field	Transfer Protocol
ASCII_Prm+___2W_i/o	2 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+___4W_i/o	4 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+___16W_i/o	16 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+___32W_i/o	32 words	Free ASCII driver, 3964R, RK512
ASCII_Prm+___64W_i/o	64 words	Free ASCII driver, 3964R, RK512

## Modifications up to Release 10

### *Module Overview:*

### ASCII | 3964R | RK512

Module Name	I/O Field	Transfer Protocol
MODUL_C1C1C101	2 words	Free ASCII driver, 3964R, RK512
MODUL_C1C3C301	4 words	Free ASCII driver, 3964R, RK512
MODUL_C1CF01	16 words	Free ASCII driver, 3964R, RK512
MODUL_C1DF01	32 words	Free ASCII driver, 3964R, RK512
MODUL_C1FFF01	64 words	Free ASCII driver, 3964R, RK512

The following modules are exclusively for manufacturer-specific applications.

MODUL\_C1414101\_\_\_\_\_  
 MODUL\_C1434301\_\_\_\_\_  
 MODUL\_C1858703\_\_\_\_\_  
 MODUL\_C1858C03\_\_\_\_\_  
 MODUL\_C1C2C303\_\_\_\_\_  
 MODUL\_82000004\_\_\_\_\_  
 MODUL\_42C10104\_\_\_\_\_  
 MODUL\_C1CF07\_\_\_\_\_  
 MODUL\_C1DF07\_\_\_\_\_  
 MODUL\_C1FFF07\_\_\_\_\_

## 2. Manuals of the Current Product Version

Title	Version
Doku_Media_Kit_ASCII_3964R_RK512_R16_D	1.0
Doku_Media_Kit_ASCII_3964R_RK512_R16_E	1.0
Doku_Media_Kit_MODBUS_R16_D	1.0
Doku_Media_Kit_MODBUS_R16_E	1.0
Doku_Media_Kit_Sartocheck_R19	1.0

### 3. Scope of Delivery

The SERIAL-PROFIBUS-INTERFACE SPI 3 is offered optionally with RS 232, RS 422 or RS 485 interface on the serial side. A respective GSD file, **THDP0091.GSD**, is available for free-of-charge download from our website, [www.t-h.de](http://www.t-h.de). Please visit the site also for respective documentations in German and English language, and for example projects for configuration with SIMATIC S5/S7 control systems.

### 4. Compatibility

All SPI 3 releases are downwards compatible. In case of device failure in your application, you can replace the failed device with a higher-release SPI 3 unit without any modifications in your controller.

To benefit fully from its functions if you use an SPI 3 with higher release, you need to update the GSD file.

### 5. Notes and Known Problems

Please visit our website, [www.t-h.de](http://www.t-h.de), for any current problems and proposed solutions regarding SPI 3 application.

- **SPI 3 Rel.17**

A failure during initialisation of SPI3 can cause a PLC STOP by using the following MODBUS modules.

MODBUS\_Prm\_\_\_\_2W\_i/o

MODBUS\_Prm\_\_\_\_4W\_i/o




This was fixed in Release 18.

- **SPI 3 Rel.16 and higher**

Exclusive use of the "MODBUS\_Master + Channel" module only causes errors in S7 project translation.

The "MODBUS\_Master + Channel" and "MODBUS\_Master\_Head" modules are simple front modules. You need to insert another "MODBUS\_REG..." module.

## 6. Release Authorization

Name	Company	Function	Date	Signature
Frank Zucknik	Trebing & Himstedt	Author	27-June-2008	
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Stefan Trebing	Trebing & Himstedt	Released	27-June-2008	
Note: Signatures on the original only				