

## I/O module - IB ST 24 TEMP 4 RTD - 2700843

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



INTERBUS-ST analog input module, 4 inputs, RTD, 2-, 3-, and 4-conductor connection, IP20 degree of protection, consisting of: terminal part with screw connection and module electronics

### Product Description


The module is designed for use within an ST station. It is used to acquire signals from resistive temperature sensors.

### Your advantages

- ✓ 4 analog input channels for connecting resistance temperature detectors (RTDs)
- ✓ Connection of sensors in 2-, 3-, and 4-conductor technology



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 660617
GTIN	4046356660617
Weight per Piece (excluding packing)	580.000 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

#### Dimensions

Width	118 mm
Height	116 mm

# I/O module - IB ST 24 TEMP 4 RTD - 2700843

## Technical data

### Dimensions

Depth	117 mm
-------	--------

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Degree of protection	IP20

### General

Mounting type	DIN rail
Net weight	582.7 g
Operating mode	Process data mode with 4 words
Diagnostics messages	Failure of the internal I/O supply I/O error message sent to the bus coupler
	F1 fuse failure I/O error message sent to the bus coupler
	I/O supply failure I/O error message sent to the bus coupler

### Interfaces

Designation	ST local bus
Number	2
Connection method	ST local bus connector
Transmission speed	500 kbps
Transmission physics	Copper

### Power supply for module electronics

Connection method	ST local bus connector
Designation	Communications power
Supply voltage	9 V DC (from the ST local bus)
Current consumption	typ. 54 mA
	max. 80 mA
Power consumption	typ. 0.5 W
Designation	Periphery supply voltage $U_s$
Voltage	24 V DC
Designation	Periphery supply voltage $U_s$
Supply voltage	24 V DC
Protective circuit	Reverse polarity protection Serial diode

### Analog inputs

# I/O module - IB ST 24 TEMP 4 RTD - 2700843

## Technical data

### Analog inputs

Input name	Analog RTD inputs
Description of the input	Inputs for resistive temperature sensors
Number of inputs	4 (for resistance temperature detectors)
Connection technology	2-, 3-, 4-conductor (shielded)
Sensor types (RTD) that can be used	Pt 100, Pt 1000, Ni 100, Ni 1000
Measuring principle	Sigma/Delta process
Measured value representation	16 bit two's complement
A/D converter resolution	24 bit

### Electrical isolation

Test section	Bus/Inputs 500 V AC 50 Hz 1 min.
	Supply voltage/inputs 500 V AC 50 Hz 1 min.
	Supply voltage/Ground conductor 500 V AC 50 Hz 1 min.
	I/O voltage/Ground conductor 500 V AC 50 Hz 1 min.

### Standards and Regulations

Immunity to ESD	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
Immunity to EF	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to burst	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
Immunity to surge	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: ±0.5 kV/±0.5 kV (symmetrical/asymmetrical), ±1 kV to shielded I/O cables
Immunity to conducted interference	Immunity test in accordance with EN 61000-6-2/IEC 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Interference emission	Noise emission test in accordance with EN 61000-6-4/IEC 61000-6-4 EN 55011 Class A
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

# I/O module - IB ST 24 TEMP 4 RTD - 2700843

## Classifications

### eCl@ss

eCl@ss 10.0.1	27242601
eCl@ss 11.0	27242601
eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242601
eCl@ss 9.0	27242601

### ETIM

ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 6.0	EC001596
ETIM 7.0	EC001596

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Accessories

### Accessories

#### Bridge

Bridge - IB ST LBC - 2836492



Spare local bus cable, for INTERBUS-ST modules

## I/O module - IB ST 24 TEMP 4 RTD - 2700843

### Accessories

Insertion bridge - EB 84 IB ST BU - 2836269



Insertion bridges, divisible, isolated comb spine, color blue, 84-pos.

---

Insertion bridge - EB 84 IB ST RD - 2836272



Insertion bridges, divisible, isolated comb spine, color red, 84-pos.

---

### Fuse

Fuse - IBS TR5 0,4AT - 2753478



Replacement fuse, for INTERBUS-ST modules

---

### Spare parts

Replacement electronics module - IB STME 24 TEMP 4 RTD - 2701958



INTERBUS-ST analog input module, 4 inputs, RTD, 2-, 3-, and 4-conductor connection, IP20 degree of protection, consisting of: module electronics only

---