

## TST.

### **CPU** module for Zone 1

Series 9442/32





- Supports PROFIBUS DP, PROFINET, Modbus TCP+RTU and EtherNet/IP™; incl. HART transmission and redundancy
- RS485-IS (max. 1.5 Mbps) and Ethernet 100BASE-TX (max. 100 Mbps) interfaces
- Extensive diagnostics based on NE 107
- Supports FDT/DTM, OPC UA and web servers for integration in asset management systems
- Extended ambient temperature range from -40 to +75 °C

#### MY R. STAHL 9442B



ARTA EtherNet

et/IP Modbus TCP + RTU



PROF!

PROFU NET

The 9442/32 CPU module functions as a gateway between the IS1+ Remote I/O system and the automation system. All supported communication protocols are in the CPU module and can be configured by the user. In addition to the process values, other information such as diagnostics, parameterisation and configuration is transmitted via the CPU module. The 9496 socket and the 9494 BusRail are used for communicating with the I/O modules. Integration in control systems and plant asset management tools is based on standards such as GSD, EDS, web servers and FDT/DTM.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Ex interface		•	•			
Installation in		•	•			

Selection Table					
Installation	Zone 1	1			
RS-485 interface protocol	RJ45 protocols	USB protocols	Product Type	Art. No.	Weight
Profibus DP V1 HART Profibus DP V0 Modbus RTU	MODBUS TCP EtherNet/IP™ PROFINET	Service bus	9442/32-10-00	279953	1 kg

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex ib [ia Ga] [ib Gb] IIC T4 Gb
ATEX gas explosion protection	⑤ II 2 (1) (2) G Ex ib [ia Ga] [ib Gb] IIC T4 Gb
Certificates	ATEX (PTB), IECEx (PTB), India (PESO)
Declaration of Conformity	ATEX (EUK)
Electrical Data	
RS485 interface connection	Sub-D plug, 9-pole
RS485 interface	As per PROFIBUS specification RS 485-IS
RS-485 interface protocol	Profibus DP V1 HART Profibus DP V0 Modbus RTU
Ethernet interface connection	2 x RJ45 (EIA/TIA 568B) con.
Interface RJ45	Unmanaged switch function 100BASE-TX-IS
USB interface	Type A socket

1



**A4** 

Technical Data	
Electrical Data	
USB version	USB 2.0 IS
Auxiliary Power	
Max. current consumption	300 mA
Max. power dissipation	5 W
Ambient Conditions	
Ambient temperature	-40 °C 65 °C (without mounting plate) -40 °C 70 °C(With 3 mm sheet steel mounting plate) -40 °C 75 °C(With 6 mm aluminium mounting plate)
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP30

Accessories			
Figure	Description	Art. No.	Weigh
Ethernet media co	onverter		
	Multi-mode media converter for installation in Zone 1 For Ethernet (PROFINET, EtherNet/IP, Modbus TCP) via fibre optic cables in Zone 1 (Class 1 IEC 60825-1 laser) Conversion from 100BASE-FX to 100BASE-TX-IS "Ex ia" 100BASE-FX: 1 port multi-mode, LC, 100 MBps, up to 3 km 100BASE-TX-IS: 1 port, RJ45, 100 MBps, up to 100 m	294420	350
	Single-mode media converter for installation in Zone 1 For Ethernet (PROFINET, EtherNet/IP, Modbus TCP) via fibre optic cables in Zone 1 (Class 1 IEC 60825-1 laser) Conversion from 100BASE-FX to 100BASE-TX-IS "Ex ia" 100BASE-FX: 1 port single-mode, LC, 100 MBps, up to 30 km 100BASE-TX-IS: 1 port, RJ45, 100 MBps, up to 100 m	294451	350
Series 9496/32 s	ocket for CPU & power modules		
	Zone 1 3 slots for mounting 1 x CPU and 2 x power module or 2 x CPU and 1 x power module Dimensions approx. L = 167 mm, W = 96 mm, H = 50.6 mm	290095	400
	Zone 1 4 slots for mounting 2 x CPU and 2 x power module Dimensions approx. L = 167 mm, W = 152 mm, H = 50.6 mm	290162	600
Fieldbus isolating	repeater Series 9185/11		
	Equipment for installation in safe areas or Zone 2/Div. 2 For fieldbuses with RS485-IS interface – Zone 1/Class I, II, III Division 1 and Class I, II, III Zone 1 Suitable for PROFIBUS DP, Modbus, R. STAHL ServiceBus RS 232, RS 422, RS 485 interface with the automation system Transmission rate automatically set with PROFIBUS DP Adjustable transmission rate (1.2 kbps to 1.5 Mbps) 24 V AC/DC auxiliary power For further information, see the Series 9185/11 data sheet	227598	350
Sub-D plug, RS-4	85 IS, angled		
	9-pin for connecting fieldbus or ServiceBus to CPU & power module Series 9440/22, 9185 fieldbus isolating repeater and 9786/12-11 media converter.  The end-of-line resistor is installed and switchable. For RS 485 IS (according to Profibus standard).  Ambient temperature: -40 °C to +70 °C	162693	100
¢1.0.	9-pin for connecting 9185 fieldbus isolating repeater and 9786/12-11 media converter. The end-of-line resistor is installed. For RS-485 IS (according to Profibus standard). Ambient temperature: -25 °C to +70 °C	201805	50

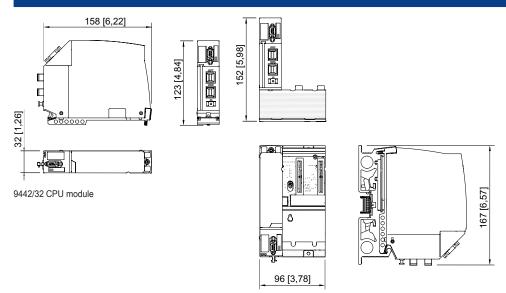
# CPU module for Zone 1 Series 9442/32

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Figure	Description	Art. No.	Weigh
IS1 DTM devices Seri			
	<ul> <li>Parameterisation and configuration of the IS1+ system</li> <li>Communication with HART-capable field devices</li> <li>Supports all common FDT frame applications (e.g. FieldCare, PactWare™)</li> <li>Condition monitoring</li> <li>Scan function for automatic topology generation</li> <li>Download from r-stahl.com</li> </ul>	-	-
	9499/DTM-IS1-02 Com/Device/HART 30 Free-of-charge software licence for up to 30 HART devices	251237	-
	9499/DTM-IS1-04 Com/Device/HART 300 Software licence for up to 300 HART devices	251239	-
	9499/DTM-IS1-06 Com/Device/HART unltd. Software licence for an unlimited number of HART devices	251240	-
IS1 PCS7 APL field de	evice library		
APL SIEMENS	Simple integration of IS1+ systems in SIEMENS PCS7 (V9 SP2 to V9.1 SP2): - PROFIBUS DP with CPM 9440 from GSD 3.12; CPU 9442 from GSD 5.14 - PROFINET with CPU 9441 from GSDML-V2.3-Stahl-RIO-20140206; CPU 9442 from GSDML-V2.34-Stahl-RIO9442-20200427 Further information and ordering only available from Siemens: www.siemens.com/mvdi	-	-
AOI tool			
AOI	Simple integration of IS1+ systems in Rockwell ControlLogix and CompactLogix via EtherNet/IP and AOI (add-on instructions). Note: The 9499/DTM-IS1 DTM is also required. This can be downloaded from r-stahl.com	-	-
RS485 media convert	er		
	Media converter for installation in Zone 1.  For fieldbuses (PROFIBUS DP, Modbus RTU) using optical intrinsically safe "Ex op is" fibre optic in Zone 1.  Compatible with Series 9786 devices.  Point-to-point, linear structure or optical ring.  With diagnostics function including error signalling.  Simple parameterisation using a rotary switch.  Data rates from 9.6 kbps to 1.5 Mbps possible.  For further information, see the data sheet for the Series 9786 media converter.	308562	825
	Media converter for installation in Zone 2.  For fieldbuses (PROFIBUS DP, Modbus RTU) using optical intrinsically safe "Ex op is" fibre optic in Zone 1.  Compatible with Series 9786 devices.  Point-to-point, linear structure or optical ring.  With diagnostics function including error signalling.  Simple parameterisation using a rotary switch.  Data rates from 9.6 kbps to 1.5 Mbps possible.  For further information, see the data sheet for the Series 9786 media converter.	308563	814
USB RS485 converter			
	USB/RS485-IS converter for installation in Zone 2 Interference-resistant, bidirectional conversion of a USB interface to an intrinsically safe RS485 interface, with power supply via the USB port	295356	170
annu.	For further information, see the Series 9787 data sheet – MY R. STAHL 9787A		
Call	USB-IS/RS485-IS converter for installation in Zone 1 Interference-resistant, bidirectional conversion of an intrinsically safe USB interface to an intrinsically safe RS485 interface, with power	285849	170
	supply via the USB port		

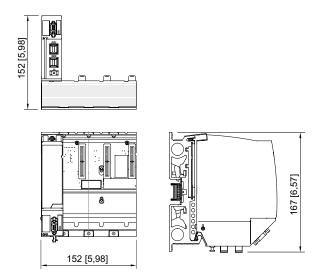


**A4** 

#### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



9442/32 CPU module and 9496/32-03-00 socket



9442/32 CPU module and 9496/32-04-00 socket