

CPU module for Zone 2/Div. 2

Series 9442/35





- Supports PROFIBUS DP, PROFINET, Modbus TCP+RTU and EtherNet/IP™; incl. HART transmission and redundancy
- RS-485 (max. 12 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 9442A



PROFU







Modbus TCP + RTU



The 9442/35 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			•			

	NEC® 500 CE Code Appendix J Class I Class II Class III					
Division	1	2	1	2	1	2
Ex interface		•				
Installation in		•				

		Code C° 505 s I			18 EC® 506		
Zone	0	1	2	20	21	22	
Ex interface			•				
Installation in			•				

Selection Table				
Installation	Zone 2			
RS-485 interface pro	tocol RJ45 protocols	USB protocols	Product Type	Art. No.
Modbus RTU Profibus DP V0 Profibus DP V1 HAR	MODBUS TCP EtherNet/IP™ PROFINET	Service bus	9442/35-10-00	246854

Please order the 9445/35 power module and the 9496/35 socket separately (see accessories).

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex ec ia [ia Ga] IIC T4 Gc
ATEX gas explosion protection	⑤ II 3 (1) G Ex ec ia [ia Ga] IIC T4 Gc
Certificates	ATEX (PTB), Canada (FM), China (NEPSI), IECEx (PTB), Korea (KTL), USA (FM)
Declaration of Conformity	ATEX (EUK), China (CCC)
Electrical Data	
Type RS-485 connector	Sub-D connector
No. of pins RS-485 conn.	9
RS485 interface	As per PROFIBUS specification
RS-485 interface protocol	Modbus RTU Profibus DP V0 Profibus DP V1 HART
Ethernet interface connection	2 x RJ45 (EIA/TIA 568B) socket

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Technical Data	
Technical Data	
Electrical Data	
Interface RJ45	100BASE-TX Unmanaged switch function
RJ45 protocols	MODBUS TCP EtherNet/IP™ PROFINET
USB interface	Type A socket
USB version	USB 2.0
USB protocols	Service bus
Auxiliary Power	
Power supply	Via socket 9496 and PM 9445/35
Max. current consumption	0.3 A
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.	Weight
Series 9496/35 s	ocket for CPU & power modules		
	Zone 2 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	246871	400
	Zone 2 4 slots for mounting 2 x CPU and 2 x power module Dimensions approx. L = 167 mm, W = 152 mm, H = 50.6 mm	262392	600 (
Fieldbus isolating	repeater Series 9185/12		
	Equipment for installation in safe areas or Zone 2/Div. 2 For fieldbuses with RS-485 interface 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 9185/12 data sheet	227600	350
RS485 media con	verter		
	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 (
FO fieldbus isolati	ng repeater, Zone 2/Div. 2		
i i	Isolating repeater for installation in Zone 2/Div. 2 For fieldbuses using optical intrinsically safe "Ex op is" fibre optic in Zone 1/Div. 1 Point-to-point or linear structure Comprehensive diagnostics function and fault message contact Suitable for PROFIBUS DP up to 1.5 Mbps For further information, see the data sheet for Series 9186 FO fieldbus isolating repeaters	160625	244

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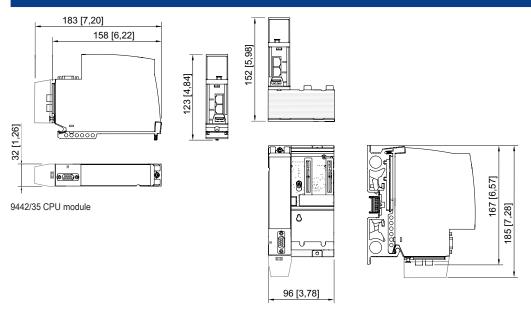
Figure	Description	Art. No.	Weight
FX op is/TX SC media	converter for Zone 2		
	Media converter from 10/100 BASE-TX (1 x RJ45 port) to 100 BASE-FX "Ex op is" (1 x FO port SC); multi-mode (up to 4 km range); MY R. STAHL: 9721A	220381	240 g
Unmanaged switch FX	op is/TX SC for Zone 2		
	Unmanaged switch FX op is auf TX; SC plug connector FO cable 4 multi-mode (MM), 2 RJ45, installation in Zone 2	243427	500 g
IS1 DTM devices Serie	s 9499/DTM		
	- Parameterisation and configuration of the IS1+ system - Communication with HART-capable field devices - Supports all common FDT frame applications (e.g. FieldCare, PactWare™) - Condition monitoring - Scan function for automatic topology generation - Download from r-stahl.com	-	-
	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	vice 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	-	-
USB RS485 converter			
. mina.	USB RS485 converter for installation in Zone 2. Interference-resistant, bidirectional conversion of USB data to serial RS485 data with power supply via the USB port. Can be used for various different applications, e.g. if PCs do not have RS485 interfaces. For further information, see the Series 9787 data sheet – MY R. STAHL 9787A	266011	170 g
Sub-D plug, RS-485			
THE STATE OF THE S	9-pin for connecting fieldbus or ServiceBus to CPU & power module Type 9440/15, 9185 fieldbusisolatingrepeater and 9786/15- 12 media converter. The end-of-line resistor is installed and switchable. For non-intrinsically safe RS-485. Ambient temperature: -40 °C to +75 °C	105715	60 g

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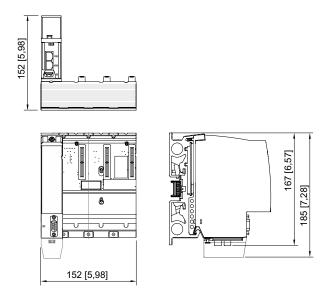


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Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



9442/35 CPU module and 9496/35-03-00 socket



9442/35 CPU modules + 9496/35-04-00 socket