S +

Series 9442/35 for Zone 2 / Cl. I. II. Div. 2



- · Support for PROFIBUS DP, PROFINET, Modbus TCP+RTU
- and EtherNet/IP™; incl. HART transmission and redundancy
- RS485 interfaces (max. 12 Mbit/s) and Ethernet 100BASE-TX (max. 100 Mbit/s)
- · Comprehensive diagnostics based on NE 107
- Support of FDT/DTM, OPC UA and web server for integration in asset management systems
- Enhanced ambient temperature range from -40 °C to +75 °C (-40 °F to +167 °F)

MY R. STAHL 9442A



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Etheri\et/IP

HART COMMUNICATION PROTOCOL

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 over the CPU module. Communication with the I/O modules is implemented via the 9496 socket and the 9494 BusRail. Integration in control systems and plant asset management tools is implemented using standards such as GSD, EDS, web servers, OPC UA and FDT/DTM.

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

	CE Code Sect NEC® 505 Class I			on 18 NEC® 506		
Zone	0	1	2	20	21	22
Ex interface			•			
Installation in			•			

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

Selection Table		
Installation	Zone 2 / Cl. I, II, Div. 2	
Product Type		Art. No.
9442/35-10-00		246854 🔺

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

Technical Data	
Explosion Protection	
FMus certificate	FM17US0332X
cFM certificate	FM16CA0134X
Marking cFMus	NI, Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex ec ia [ia Ga] IIC T4 Gc Ta = -40°C +75°C See Doc. 9442 6 031 002 1
IECEx gas explosion protection	Ex ec ia [ia Ga] IIC T4 Gc
Certificates	ATEX (PTB), Canada (FM), China (NEPSI), IECEx (PTB), Korea (KTL), USA (FM)
Electrical Data	
RS485 interface connection	Sub-D plug, 9-pole
Copper RS485 transmission length/rate	1200 m at 9.6 to 93.75 kbps 1000 m at 187.5 kbps 400 m at 500 kbps 200 m at 1.5 Mbps 100 m at 12 Mbps



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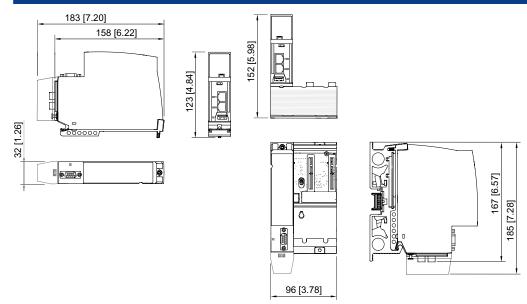
Technical Data	
Electrical Data	
Transfer length/rate FO RS485	Approx. 2000 m at 1.5 Mbit/s
Ethernet interface connection	2 x RJ45 (EIA/TIA 568B) socket
Auxiliary Power	
Max. current consumption	0.3 A
Power supply	Via socket 9496 and PM 9445/35
Max. power dissipation	5 W
Ambient Conditions	
Ambient temperature °F	-40°F +149°F (without mounting plate) -40°F +158°F(With 3 mm sheet steel mounting plate) -40°F +167°F(With 6 mm aluminium mounting plate)
Ambient temperature °C	-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

igure	Description	Product Type	Art. No.	Weight
•	·	Froduct Type	AIL NO.	vveigni
Series 9496/35 SOCKE	t for CPU & power modules Zone 2 / Div. 2	9496/35-03-00	246871▲	400
	3 slots for mounting / installing 1 x CPU and 2 x power module or 2 x CPU und 1 x power module Dimensions: approx. L = 167 mm, W = 96 mm, H = 50.6 mm	9490/33-03-00	240071	400
	Zone 2 / Div. 2 4 slots for mounting / installing 2 x CPU and 2 x power module Dimensions: approx. L = 167 mm, W = 152 mm, H = 50.6 mm	9496/35-04-00	262392	600
Fieldbus Isolating Rep	peater 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	9185/12-45-10s	227600	350
O fieldbus isolating r	epeater, Zone 2/Div. 2			
Tana San San San San San San San San San	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	9186/25-12-11	160625	244
X 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	9721/13-11-14	220381	240
Jnmanaged switch F	C op is/TX SC for Zone 2			
Manager of the second of the s	Unmanaged switch FX op is auf TX; SC plug connector FO cable 4 multi-mode (MM), 2 RJ45, installation in Zone 2	9721/13-42-14	243427	500



Accessories				
Figure	Description	Product Type	Art. No.	Weight
DTM IS1+ devices for PROFIBUS DP and Ethernet				
DTM O	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	-	-	-
IS1 PCS7 APL field dev	ice library			
APL SIEMENS	Easy integration of IS1+ systems into SIEMENS PCS7 (V9 SP2 V9.1 SP2): - PROFIBUS DP with CPM 9440 starting with GSD 3.12; CPU 9442 starting with GSD 5.14 - PROFINET with CPU 9441 starting with GSDML-V2.3-Stahl-RIO-20140206; CPU 9442 starting with GSDML-V2.34-Stahl-RIO9442-20200427 Further information and order processing exclusively through company Siemens: www.siemens.com/mvdi	-	-	-
AOI tool				
AOI O ROCKWELL	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				
and the same of th	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	9787/15-11-11	266011	170 g
Sub-D plug, RS-485				
0.00	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

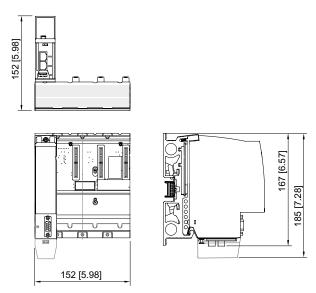
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



CPU Module 9442/35 + Base 9496/35-03-00



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CPU Module 9442/35 + Base 9496/35-04-00