



- Suitable for Profibus DP V0/V1 HART, Modbus RTU
- Supports system redundancy and optical rings
- Integration in plant asset management systems via ServiceBus and FDT/DTM

A4

WebCode 9440B



Modbus RTU HART COMMUNICATION PROTOCOL

Series 9440/15 CPU & power modules (CPM) for Zone 2 are used to supply up to 16 IS1+ I/O modules and field circuits with intrinsically safe power. RS485 with PROFIBUS DP or Modbus RTU is used for communicating with the automation system. The CPMs support system redundancy and optical rings. A DTM and process bus or ServiceBus are used for asset management integration.

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

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

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


Selection Table					
Installation	Zone 2/Division 2				
Protocols	Redundancy	Product Type	Art. No.	Weight	
Modbus RTU	Full redundancy	9440/15-01-11-C1198	162188	610 g	
Profibus DP V0 Profibus DP V1	According to PNO Full redundancy	9440/15-01-11-C1455	203584	610 g	
Profibus DP V1 HART	Full redundancy	9440/15-01-11-C1243	162201	610 g	

Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex ec [ja, ib Gb] IIC T4 Gc
ATEX gas explosion protection	Ⓔ II 3 (2) G Ex ec [ja, ib Gb] IIC T4 Gc
Certificates	ATEX (PTB), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (PTB), Korea (KTL), USA (FM)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
Electrical Data	
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
Fieldbus RS485 connection	Sub-D socket, 9-pole
ServiceBus RS485 connection	Sub-D socket, 9-pole
Auxiliary Power	
Auxiliary power voltage range	20 to 35 V DC
Current consumption (without I/O modules)	0.3 A at 24 V DC
Current consumption (8 I/O modules)	Approx. 2.5 A at 24 V DC

Technical Data	
Auxiliary Power	
Current consumption (16 I/O modules)	Approx. 4.9 A at 24 V DC
Power dissipation (without I/O modules)	7.2 W
Power dissipation (per I/O module)	1 W
Ambient Conditions	
Ambient temperature	-20°C ... +65°C
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP20 connections IP30 modules
Width	96.5 mm
Depth	107 mm
Length	148 mm

Accessories				
Figure	Description	Art. No.	Weight	
Cable for PROFIBUS DP, RS 485, RS485-IS				
	Cable type: BUS 4000-C-PE 2x0.64mm 02YS(St) CY2Y Colour (sheath): Black Application area: Outdoors Installation outdoors and directly in the ground, UV-resistant	105444	300 g	
Cable for PROFIBUS DP, RS485				
	Cable type: 02YS(St) CHSH Colour (sheath): Violet Application range: Offshore Halogen-free, reinforcement made from steel wire braid	209430	-	
	Cable type: BUS 4000-C-PVC 2x0.64 mm 02YS(St) CY Colour (sheath): Violet Application area: Indoors Standard type for indoor installation	105438	300 g	
Sub-D plug, RS-485				
	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	
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 g	
FO fieldbus isolating repeater, Zone 2/Div. 2				
	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 Compatible with Series 9186 devices Optical ring possible Comprehensive diagnostics function and fault message contact Suitable for PROFIBUS DP to 1.5 Mbps For further information, see the data sheet for Series 9186 FO fieldbus isolating repeaters	160624	244 g	
	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 g	

Accessories

Figure	Description	Art. No.	Weight
IS1 PCS7 APL field device library			
	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	-	-

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

