



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

A4

WebCode 9440B



Modbus RTU



9440/15 series CPU & power modules (CPM) for Zone 2 are used for the intrinsically safe supply of power to up to 16 IS1+ I/O modules and to field circuits. 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 service bus are used for asset management integration.

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




	NEC 505 Class I			NEC 506		
	0	1	2	20	21	22
Zone						
Ex interface			•		•	•
Installation in			•		•	•

	NEC 500					
	Class I		Class II		Class III	
	1	2	1	2	1	2
Division						
Ex interface		•		•		•
Installation in		•		•		•



Selection Table						
Zone 2 / Division 2						
Installation	Protocols	Redundancy	Product Type	Art. No.	PS	Weight kg
	Modbus RTU	full redundancy line redundancy	9440/15-01-11-C1198	162188	22	0.610
	Profibus DP V0 Profibus DP V1 Profibus DP V1 HART	acc. to PNO full redundancy line redundancy	9440/15-01-11-C1455	203584	22	0.610
		full redundancy line redundancy	9440/15-01-11-C1243	162201▲	22	0.610

Technical Data	
Explosion Protection	
Gas explosion protection IECEx	Ex nA [ia, ib Gb] IIC T4 Gc
Gas explosion protection ATEX	⊕ II 3 (2) G Ex nA [ia, ib Gb] IIC T4 Gc
Gas explosion protection EAC	2 Ex nA [ia Ga, ib Gb] IIC T4 Gc X
Certificates	ATEX (PTB), Brazil (ULB), Canada (CSA), Canada (FM), EAC (STV), IECEx (PTB), Korea (KTL), USA (FM)
Ship approval	ABS, CCS, ClassNK, DNVGL, RINA
Electrical Data	
Transmission distance/rate copper RS485	1200 m at 9.6...93,75 kbit/s 1000 m at 187.5 kbit/s 400 m at 500 kbit/s 200 m at 1.5 Mbit/s

Technical Data	
Auxiliary Power	
Auxiliary power voltage range	20 ... 35 V DC
Current consumption (without I/O modules)	0.3 A (24 V DC)
Current consumption (with	Approx. 2.5 A at 24 V DC
Current consumption (with 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 <Discret	1 W
Ambient Conditions	
Ambient temperature	-20°C ... +65°C
Mechanical Data	
Connection Fieldbus RS485	Sub-D socket 9-pole
Connection ServiceBus RS485	Sub-D socket 9-pole
Degree of protection IP (IEC 60529)	IP20 connections IP30 modules
Width	96.5 mm
Depth	107 mm
Length	148 mm

Accessories and Spare Parts				
Figure	Description	Art. No.	Weight kg	
Cable for PROFIBUS DP, RS 485, RS485-IS				
	Cable type: BUS 4000-C-PE 2x0,64mm 02YS(St) CY2Y Colour (sheath): black Application area: Outdoor Installation outdoors and directly in the ground, UV-resistant	105444	0.300	
Cable for PROFIBUS DP, RS485				
	Cable type: 02YS(St) CHSH Colour (sheath): violet Application area: Offshore Halogen-free, steel wire braid armoured cable	209430	-	
	Cable type: BUS 4000-C-PVC 2x0,64mm 02YS(St) CY Colour (sheath): violet Application area: Indoor Standard type for indoor installation	105438	0.300	
Sub-D plug + PG interface				
	9-pin for connection of the fieldbus or ServiceBus to the CPU & power module Series 9440/15 and fieldbus-isolating repeater 9185. Integrated terminator can be switched on or off. For non-intrinsically safe RS-485.	105715 ▲	0.001	
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 service bus. RS-232, RS-422, RS-485 interface with the automation system Transmission rate automatically set with PROFIBUS DP Adjustable transmission rate (1.2 kbit/s to 1.5 Mbit/s) 24 V AC/DC auxiliary power For further information, see data sheet for 9185/12 series	227600	0.350	
Optical fieldbus isolating repeater, Zone 2 / Div. 2				
	Isolating repeater for installation in Zone 2 / Div. 2 For fieldbus via fibre optic intrinsically safe cables "ex op is" into Zone 1 / Div. 1 Optical ring possible Extensive diagnostic function and fault-contact Suitable for Profibus DP up to 1.5 MBit/s Further versions and information see data sheet of Series 9186 optical fieldbus-isolating repeater	160624 ▲	0.244	

Accessories and Spare Parts

Figure	Description	Art. No.	Weight kg
Device DTM IS1+ for PROFIBUS DP and Ethernet			
	Parameterization and configuration of the IS1+ system Communicating with HART-compatible field devices Supports all common FDT frame applications (e.g. FieldCare, PactWare™) Condition Monitoring Scan function for automatic topology generation Download at r-stahl.com	-	-
IS1 PCS7 APL field device library			
	Easy connection of IS1+ modules to the SIEMENS control system PCS7 via PROFIBUS DP. The library contains CFC driver modules created in conformance with PCS7 modules, and documentation in English. HOTLINE support inclusive. Order, processing and support are carried out directly via SIEMENS: function.blocks.industry@siemens.com Hardware/software requirements: SIEMENS PCS7 V7.1 to 8 SP2 and IS1+ CPM 9440/...C1455 from V03.45 and GSD from V03.05	-	-