



- Suitable for “op is” 100 Mbps Ethernet with PROFINET, Modbus TCP or EtherNet/IP™
- Redundant connection possible with Modbus TCP
- CPU in Zone 1 can be replaced without having to disconnect the power supply (i.e. hot-swapped)

A4

WebCode **9441A**



Modbus TCP

EtherNet/IP



The Series 9441/12 CPU for Zone 1 is used to communicate with the automation system via PROFINET, Modbus TCP or EtherNet/IP™. The connection is established by means of an optically inherently safe “op is” fibre optic, which can be connected and disconnected in hazardous areas.

IS1+ and connected HART devices are integrated in asset management systems using a DTM.

	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 1/Division 1			
Protocols	Product Type	Art. No.	Weight	
EtherNet/IP Modbus TCP PROFINET	9441/12-00-00	211045	1.3 kg	

Please order the 9444/12 power module and the 9492/12 socket separately (see accessories).

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex d [ia Ga] [op is T6 Ga] IIC T4 Gb
IECEx dust explosion protection	[Ex ia Da] [Ex op is Da] IIIC
ATEX gas explosion protection	⊕ II 2 (1) G Ex d [ia Ga] [op is T6 Ga] IIC T4 Gb
ATEX dust explosion protection	⊕ II (1) D [Ex ia Da] [Ex op is Da] IIIC
Certificates	ATEX (DEK), Brazil (ULB), Canada (FM), IECEx (DEK), International (FF), USA (FM)
Ship approval	ABS
Electrical Data	
Interface Ethernet	Fibre optic, 100BASE-FX, Ex op is (IEC 600079-28)
Transmission distance	2000 m
Transmission speed	Max. 100 Mbps
Ethernet Connection	Multi-mode 62.5/125 µm (OM1) and 50/125 µm (OM2), LC plug
Auxiliary Power	
Nominal voltage	24 V DC
Current consumption (without I/O modules)	0.36 A at 24 V DC

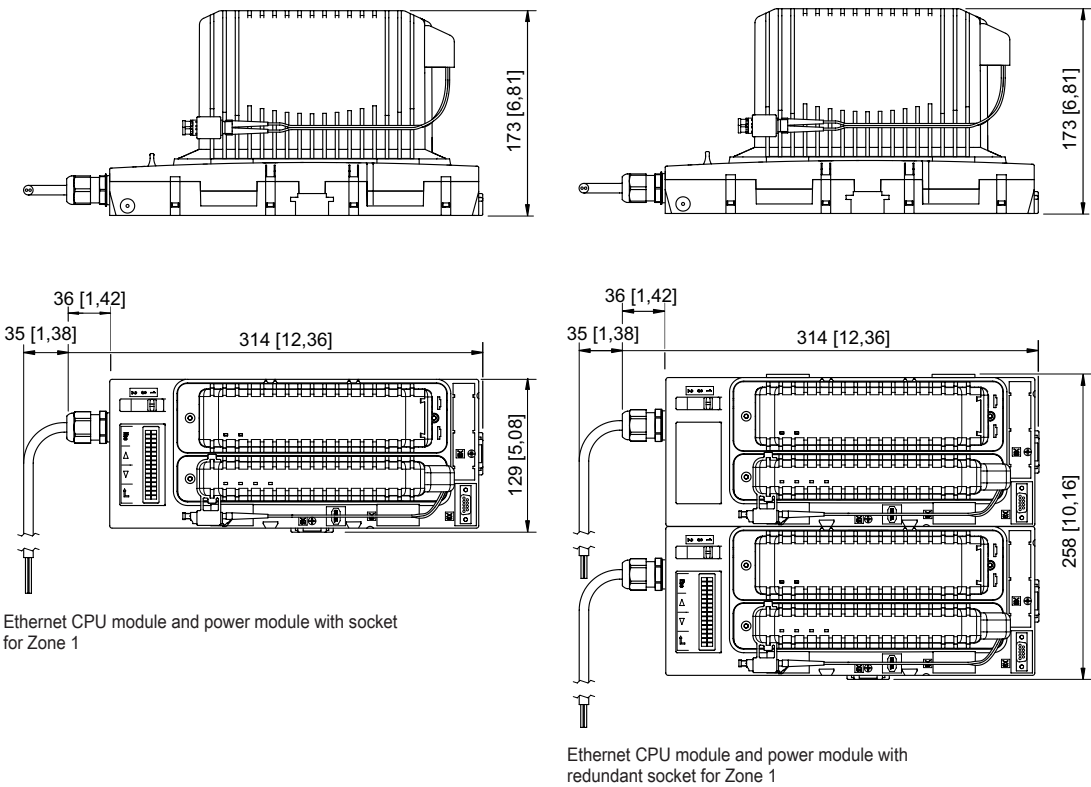
Technical Data	
Auxiliary Power	
Current consumption (8 I/O modules)	Approx. 2.6 A at 24 V DC
Current consumption (16 I/O modules)	Approx. 4.9 A at 24 V DC
Power dissipation (without I/O modules)	8.6 W
Power dissipation (with 8 I/O modules)	14 W
Ambient Conditions	
Ambient temperature	-20°C ... +65°C
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP30
Width	38 mm
Depth	158 mm
Length	226 mm

Accessories			
Figure	Description	Art. No.	Weight
IS1 DTM devices Series 9499/DTM			
	<ul style="list-style-type: none"> - 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 unlted. Software licence for an unlimited number of HART devices	251240	-
AOI tool			
	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	-	-
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	-	-
Series 9492/12 socket for CPU & power module			
	Zone 1 Fieldbus: Modbus TCP, simplex 24 V DC	166176	1.1 kg
	Zone 1 Fieldbus: EtherNet/IP™, simplex 24 V DC	166322	1.1 kg
	Zone 1 Fieldbus: PROFINET, simplex 24 V DC	166321	1.1 kg
	Zone 1 Fieldbus: Modbus TCP, redundant 24 V DC	166324	2.2 kg

Accessories			
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); WebCode: 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
FO patch cable			
	Patch cable for connecting 9441 IS1+ Ethernet CPU to 9721 media converter; LC/SC plug; length 3 m	220911	-

Socket and accessories for installation in Div. 1 available on request

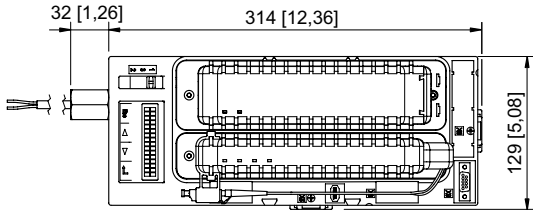
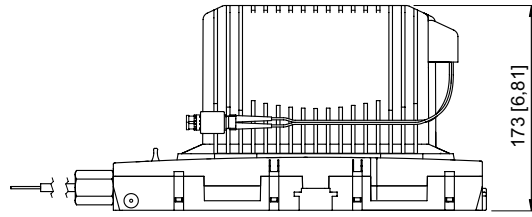
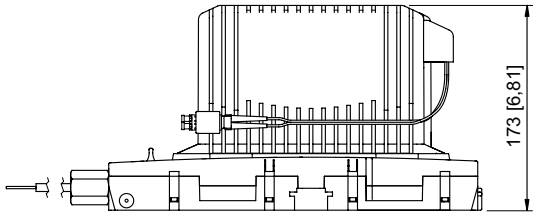
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



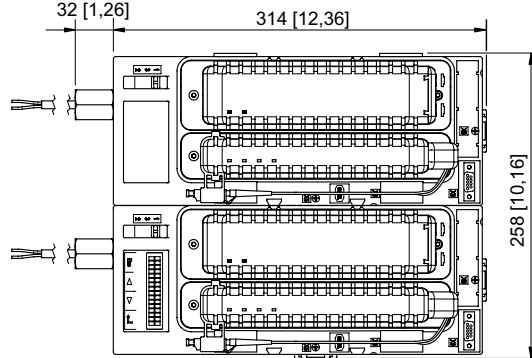
Ethernet CPU module and power module with socket for Zone 1

Ethernet CPU module and power module with redundant socket for Zone 1

A4



Ethernet CPU module and power module with socket for Div. 1



Ethernet CPU module and power module with redundant socket for Div. 1