



- Suitable for “op is” 100 Mbit/s Ethernet with PROFINET, Modbus TCP or Ethernet/IP™
- Redundant activation with Modbus TCP possible
- CPU can be hot swapped in Zone 1 and Cl. I, Div. 1

06 b

WebCode 9441A



Modbus TCP

EtherNet/IP



The 9441/12 series CPU for Zone 1, Cl. I, Div. 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 into asset management systems using a 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 Section 18					
	NEC® 505			NEC® 506		
	Class I					
Zone	0	1	2	20	21	22
Ex interface	•	•	•			
Installation in		•	•			




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

Selection Table			
Installation	Zone 1 / Cl. I, Div. 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 9492/12; 9492/13 base (see accessories) separately.			

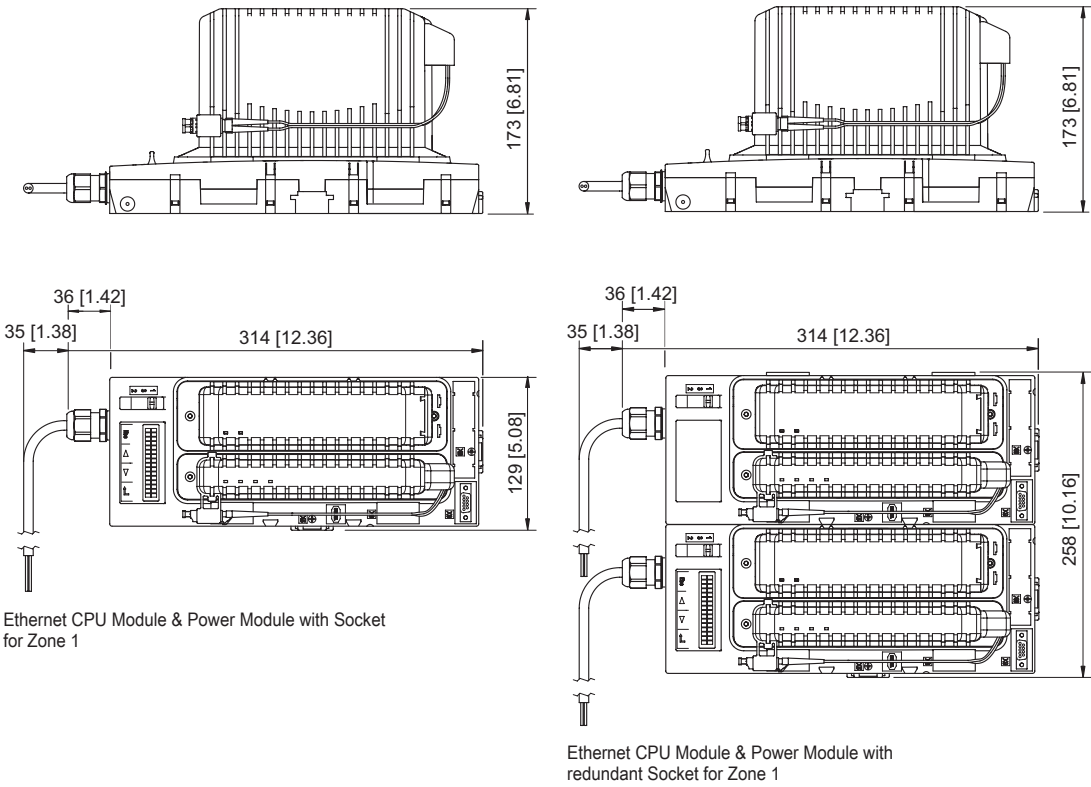
Technical Data	
Explosion Protection	
FMus certificate	FM17US0332X
cFM certificate	FM16CA0134X
Marking cFMus	XP, Class I, Div. 1, Groups A,B,C,D; Class I, Zone 1, Group IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 0, [AEx ia]/[Ex ia] IIC T4 at Ta = 65 °C See Doc. 9441 6 031 001 1
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] IIC
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

Technical Data	
Electrical Data	
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 V_{nom}	24 V DC
Current consumption (without I/O modules)	0.36 A at 24 V DC
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 °F	-4°F ... +149°F
Ambient temperature °C	-20°C ... +65°C
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP30

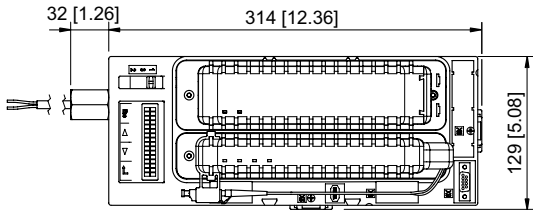
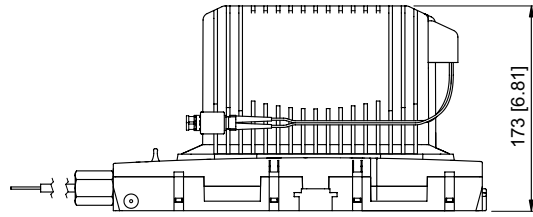
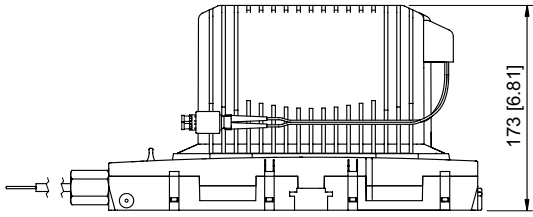
Accessories				
Figure	Description	Product Type	Art. No.	Weight
Series 9492/13 - Socket for CPU and Power Module				
	Division 1 Fieldbus: Modbus TCP, simplex 24 V DC	9492/13-13-11	202098 ▲	1.4 kg
	Division 1 Fieldbus: Modbus TCP, redundant 24 V DC	9492/13-13-12	202099	2.8 kg
	Division 1 Fieldbus: PROFINET, simplex 24 V DC	9492/13-13-31	208875 ▲	1.4 kg
	Division 1 Fieldbus: EtherNet/IP™, simplex 24 V DC	9492/13-13-41	208876 ▲	1.4 kg
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				
	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	-	-	-
Series 9492/12 socket for CPU & power module				
	Zone 1 Fieldbus: Modbus TCP, simplex 24 V DC	9492/12-11-11	166176	1.1 kg
	Zone 1 Fieldbus: EtherNet/IP™, simplex 24 V DC	9492/12-11-41	166322	1.1 kg
	Zone 1 Fieldbus: PROFINET, simplex 24 V DC	9492/12-11-31	166321	1.1 kg

Accessories				
Figure	Description	Product Type	Art. No.	Weight
Series 9492/12 socket for CPU & power module				
	Zone 1 Fieldbus: Modbus TCP, redundant 24 V DC	9492/12-11-12	166324	2.2 kg
Media converter FX op is / TX SC for Cl. I, Div. 2 and 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	9721/13-11-14	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	9721/13-42-14	243427	500 g
FO patch cable				
	Patch cable for connection of IS1+ Ethernet CPU 9441 with media converter 9721; plug LC / SC; length 3.8 ft / 3 m	-	220911	-
Accessories for Div. 1 installation on request				

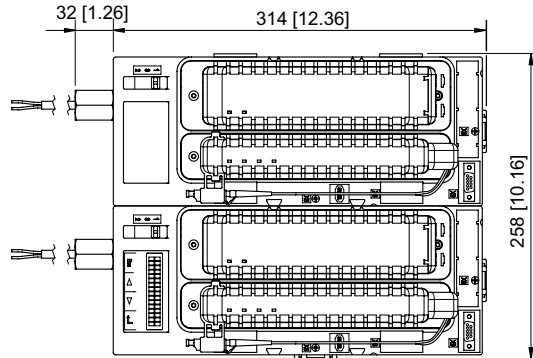
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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Ethernet CPU Module & Power Module with Socket for Div. 1



Ethernet CPU Module & Power Module with redundant Socket for Div. 1