

9400 SERIES SYSTEM SPECIFICATION

MECHANICAL

Mounting method

DIN-rail

DIN-rail types

'Top hat', 35 x 7.5 mm to EN 50022 or DIN 46277

ENVIRONMENTAL

Ambient temp

Operating -20°C to + 70°C

(except where stated in individual module specifications)

Storage -20°C to + 70°C

Relative Humidity

5 to 95% RH (non-condensing)

Ingress Protection

IP20 to BS EN 60529

(Additional protection by means of enclosure)

ELECTRICAL

EMC compliance

To EN61326:1998 Electrical equipment for measurement, control and laboratory use – EMC requirements

Electrical safety

EN 61010-1

APPLICABLE STANDARDS:

- Factory Mutual Research Co., Class No. 3610 for Class I, II, III, Divisions 1 and 2, Groups A - G hazardous locations (Intrinsically safe circuits).
- Factory Mutual Research Co., Class No. 3611 for Class I, Division 2, Groups A, B, C, D hazardous locations
- EN 60079-0:2006, IEC 60079-0:2004 Electrical apparatus for explosive gas atmospheres – General requirements
- EN 60079-11:2007, IEC 60079-11:2006 Explosive atmospheres -Equipment protection by intrinsic safety "i"
- EN/IEC 60079-15:2005 Electrical apparatus for explosive gas atmospheres - Construction, test and marking of type of protection "n" electrical apparatus
- EN 60079-25:2004, IEC 60079-25:2003 Electrical apparatus for explosive gas atmospheres - Intrinsically safe systems 'i'
- EN 60079-28:2007, IEC 60079-28:2006 Electrical apparatus for explosive gas atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
- IEC 61241-0:2004 Electrical apparatus for use in the presence of combustible dust. General requirements
- IEC 61241-11:2005 Electrical apparatus for use in the presence of combustible dust. Protection by intrinsic safety "iD"
- EN 50303:2000 Group I, Category M1 equipment intended to remain functional in atmospheres endangered by firedamp and/or coal dust
- EC Directive 94/9/EC (ATEX 100A)

PHYSICAL NETWORK

Ethernet

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EPS9460 Rev4 300310

APPROVALS

9461-ET, 9465-ET-x -xx, 9466-ET

Region	Europe (ATEX)	International IECEx	USA	Canada
Authority	SIRA	SIRA	FM	FMC
Standard	EN 60079-0:2006, EN 60079-11:2007, IEC 60079-26:2006, IEC 60079-28:2007, EN 50303:2000, IEC 61241-0:2004, IEC 61241-11:2005	IEC 60079-0:2004, IEC 60079-11:2006, IEC 60079-28:2006-08, IEC 61241-0:2004, IEC 61241-1:2005	3600 3610 3810	C22.2 No. 61010.1:2004 C22.2 No. 157:1992 CAN/CSA-E60079-0:2007 CAN/CSA-E60079-11:2002
9461-ET & 9466-ET Approved for	⊕ II 1GD Ga Ex ia IIC T4 Ex iaD 20 T135°C (Ta = -40°C to +70°C)§ ⊕ I M1 Ma Ex ia I (Ta = -40°C to +70°C)	Ga Ex ia IIC T4 Ex iaD 20 T135°C Ma Ex ia I (Ta = -40°C to +70°C)§	IS/I/1/ABCD/T4 Ta=70°C I/0/AEx ia IIC T4 Ta=70°C	IS/I/1/ABCD/T4 Ta=70°C I/0/AEx ia IIC T4 Ta=70°C
9465-ET- x-xx Approved for	⊕ II 1GD Ga Ex ia IIC T4 Ex iaD 20 T135°C Ga Ex ia op is IIC T4 (Ta = -40°C to +70°C)§ ⊕ I M1 Ma Ex ia I Ma Ex ia op is I (Ta = -40°C to +70°C)	Ga Ex ia IIC T4 Ga Ex ia op is IIC T4 Ex iaD 20 T135°C Ma Ex ia I Ma Ex ia op is I (Ta = -40°C to +70°C)§	IS/I/1/ABCD/T4 Ta=70°C I/0/AEx ia IIC T4 Ta=70°C	IS/I/1/ABCD/T4 Ta=70°C I/0/AEx ia IIC T4 Ta=70°C
Cert. no.	Sira 07ATEX2064X	IECEX SIR 07.0042X	3034995	3034995C

§ (see specification for operating temperature range)

9468-ET

Region	Europe (ATEX)	International IECEx	USA	Canada
Authority	SIRA	SIRA	FM	FMC
Standard	EN 60079-0:2006, EN 60079-11:2007, IEC 60079-26:2006, IEC 61241-0:2004, IEC 61241-11:2005	IEC 60079-0:2004, IEC 60079-11:2006, IEC 60079-26:2006, IEC 61241-0:2004, IEC 61241-11:2005	3600 3610 3810	C22.2 No. 61010.1:2004 C22.2 No. 157:1992 CAN/CSA-E60079-0:2007 CAN/CSA-E60079-11:2002
Approved for	⊕ II (1) GD ⊕ I (M1) (Ga) [Ex ia] IIC [Ex iaD] (Ma) [Ex ia] I (Ta = -40°C to +70°C)§	(Ga) [Ex ia] IIC [Ex ia D] (Ma) [Ex ia] I (Ta = -40°C to +70°C)§	AIS/I/1/ABCD/T4 Ta=70°C [I]/[0]/[AEx ia] IIC T4 Ta=70°C	AIS/I/1/ABCD/T4 Ta=70°C [I]/[0]/[AEx ia] IIC T4 Ta=70°C
Cert. no.	Sira 07ATEX2065	IECEX SIR 07.0043	3034995	3034995C
Standard	EN 60079-0:2006, IEC 60079-0:2007*, EN 60079-11:2007, EN 60079-15:2005, IEC 60079-26:2006	IEC 60079-0:2004, IEC 60079-11:2006, IEC 60079-15:2005-03		
Approved for	⊕ II 3 G Ex ic (ia) IIC T4 Gc (Ta = -40°C to +70°C)§ Ex nLc nAc (ia) IIC T4 (Ta = -40°C to +70°C)§	Ex ic [ia] IIC T4 Gc (Ta = -40°C to +70°C)§ Ex nLc nAc [ia] IIC (Ta = -40°C to +70°C)§		
Cert. no.	Sira 08ATEX4130X	IECEX SIR 08.0032X		

* (for guidance on the Gc, nLc & nAc marking) § (see specification for operating temperature range)

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9469-ET

Region	Europe (ATEX)	International IECEx	USA	Canada
Authority	SIRA	SIRA	FM	FMC
Standard	EN 60079-0:2006, EN 60079-11:2007, IEC 60079-26:2006, EN 50303:2000, IEC 61241-0:2004, IEC 61241-11:2005	IEC 60079-0:2004, IEC 60079-11:2006, IEC 61241-0:2004, IEC 61241-1:2005	3600 3610 3810	C22.2 No. 61010.1:2004 C22.2 No. 157:1992 CAN/CSA-E60079-0:2007 CAN/CSA-E60079-11:2002
Approved for	⊕ II 1GD Ga Ex ia IIC T4 Ex iaD 20 T135°C (Ta = -40°C to +60°C)§ ⊕ I M1 Ma Ex ia I (Ta = -40°C to +60°C)	Ga Ex ia IIC T4 Ex iaD 20 T135°C Ma Ex ia I (Ta = -40°C to +60°C)§	IS/I/1/ABCD/T4 Ta=60°C I/O/AEx ia IIC T4 Ta=60°C	IS/I/1/ABCD/T4 Ta=60°C I/O/AEx ia IIC T4 Ta=60°C
Cert. no.	Sira 07ATEX2064X	IECEx SIR 07.0042X	3034995	3034995C

§ (see specification for operating temperature range)

9491-PS

Region	Europe (ATEX)	International IECEx	USA	Canada
Authority	SIRA	SIRA	FM	FMC
Standard	EN 60079-0:2006, EN 60079-11:2007, IEC 60079-26:2006, IEC 61241-0:2004, IEC 61241-11:2005	IEC 60079-0:2004, IEC 60079-11:2006, IEC 61241-0:2004, IEC 61241-11:2005		
Approved for	⊕ II (1/2) GD (Ga) [Ex ia] IIB (Gb) [Ex ib] IIB [Ex iaD] [Ex ibD] ⊕ I (M1/M2) (Ma) [Ex ia] I (Mb) [Ex ib] I Ta = 0°C to +70°C	(Ga) [Ex ia] IIB (Gb) [Ex ib] IIB [Ex iaD] [Ex ibD] (Ma) [Ex ia] I (Mb) [Ex ib] I Ta = 0°C to +70°C		
Cert. no.	Sira 08ATEX2188	IECEx SIR 08.0072	Pending	Pending
Standard	EN 60079-0:2006, EN 60079-11:2007, EN 60079-15:2005, EN 60079-26:2007, IEC 60079-0:2007*,	IEC 60079-0:2007-10, IEC 60079-11:2006, IEC 60079-15:2005-03, IEC 60079-26:2006		
Approved for	⊕ II 3G (1)G (2)G Ex nAc [ia] [ib] IIB T4 (Ta = 0°C to +70°C)	Ex nAc [ia] [ib] IIB T4 (Ta = 0°C to +70°C)		
Cert. no.	Sira 08ATEX4310X	IECEx SIR 08.0117X	Pending	Pending

*(for guidance on marking)

ORDERING INFORMATION

Part No.	Description	Part No.	Description
9461-ET	IS serial to Ethernet gateway	ANT94	Omni-directional antenna - 2.4GHz, 3dBi gain
9465-ET-M-ST	IS media converter	9491-PS	IS power supply
9465-ET-M-SC	IS media converter	CSL9405-xxx	Copper twisted pair FTP Patch Cable (pre-terminated with RJ45 - RJ45 connectors)
9465-ET-S-SC	IS media converter		-xxx suffix denotes the cable length.
9466-ET	IS managed Ethernet switch		Lengths available from 0.5m – 100m
9468-ET	IS Ethernet isolator		
9469-ET	IS wireless AP/bridge		

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