

SOMAT^{XR}

EX23-R

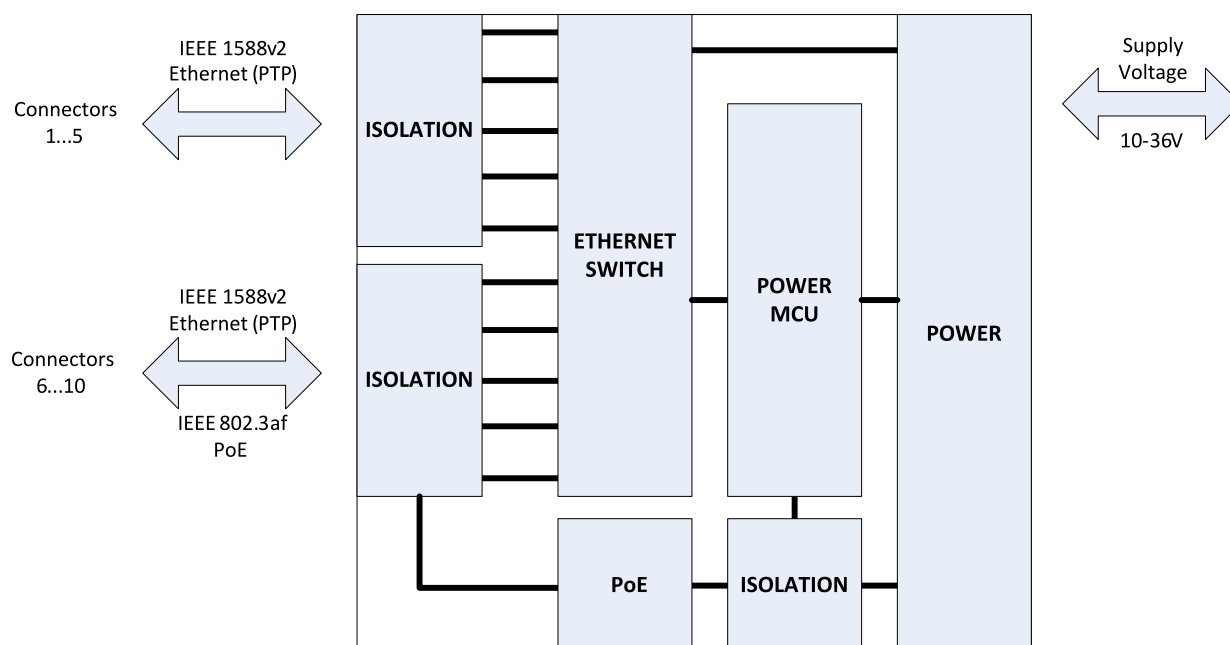
SomatXR Ethernet Switch



Special Features

- Five (5) rugged Power over Ethernet (PoE) capable ports delivering 15.4 W of power each
- Five (5) rugged Ethernet ports
- Waterproof, dust proof, shockproof, vibration proof
- Operating temperature of -40 to +80 °C

Block diagram



Specifications

General Specifications		
Interfaces	-	-
Ethernet	-	5
Ethernet (PoE)	-	5
power	-	1
serial	-	1 (HBM use only)
Supply voltage range	V _{DC}	10 ... 36 (24 V nominal (rated) voltage)
Supply voltage interruption (maximum at 24V)	ms	12.5 (with 8W PoE)
Maximum current consumption	A	10
Power consumption (at 24 V)	-	-
zero ports connected, no PoE	W	9.5
ten ports connected, no PoE	W	14.5
ten ports connected, five PoE ports at 15.4 W	W	91.5
Ethernet (data link)	-	10Base-T/100Base-TX/1000Base-T
protocol	-	TCP/IPv6 or TCP/IPv4
connection	-	M12 X-code shielded twisted pair cable (CAT-5E)
crossover	-	Auto MDI/-X
maximum cable length	m	95 at -40 °C, 85 at 20 °C, 75 at 75 °C ¹⁾
Precision timing protocol (PTP)	-	Version 2 (IEEE 1588)
device type	-	end-to-end transparent clock
sync event	-	2 step (default)
protocol	-	IPv6 multicast
accuracy	ns	< 200
Power over Ethernet (PoE)	-	IEEE 802.3af
maximum power per port	W	15.4
voltage (nominal)	V	55
classification	-	auto
wiring (alternative b)	-	blue/white blue (pins 7 and 8) = DC+ brown/white brown (pins 5 and 6) = DC-
Operating temperature range	-	-
nominal	°C [°F]	-40 ... +80 [-40 ... +176] dew point resistant
PoE de-rating	-	-
maximum temperature PoE Off ²⁾	°C	80
maximum temperature at 0 ... 25 W PoE	°C	75
maximum temperature at 25 ... 45 W PoE	°C	70
maximum temperature at 45 ... 65 W PoE	°C	65

¹⁾ Based on shielded cable lengths. Cable lengths up to or over 100 m possible using unshielded cable.

²⁾ When the EX23-R is powered up, the PoE power supply is initially off and stays off until a PoE device is connected. Once any PoE device is connected, the PoE power supply stays on until the EX23-R is powered down (even if all PoE devices are disconnected from the EX23-R).

Specifications (Continued)

General Specifications (continued)		
Operating temperature range (continued)	-	-
altitude de-rating (PoE Off)	-	-
maximum temperature at 0 m	°C	80
maximum temperature at 1500 m	°C	72.5
maximum temperature at 3000 m	°C	64.25
maximum temperature at 4500 m	°C	55.25
maximum temperature at 6000 m	°C	44
Storage temperature range	°C [°F]	-40 ... +85 [-40 ... +185]
Protection class	-	III
Degree of protection	-	IP65/IP67 per EN 60529
EMC requirements	-	CE conformity test per EN 61326-1:2005
Mechanical test	-	-
vibration	-	accord. MIL-STD202G, Method 204D, Test condition C
acceleration	m/s ²	100
duration	min	450
frequency	Hz	5 ... 2000
shock	-	accord. MIL-STD202G, Method 213B, Test condition B
acceleration	m/s ²	750
pulse duration	ms	6
number of impacts	-	18
Load dump	-	ISO 16750-2:2010 Test B 63 V _{peak}
Dimensions (H x W x D)	mm	80 x 205 x 140
Weight	g [lb]	2375 [5.24]



© HBM, Inc. All rights reserved. All details describe our products in general form only.
They are not to be understood as express warranty and do not constitute any liability whatsoever.

Americas: HBM, Inc. · 19 Bartlett Street · Marlboro · MA 01752 · USA · Tel.: (800) 578 4260 · Email: info@usa.hbm.com

Asia: Hottinger Baldwin Measurement (Suzhou) Co., Ltd. · 106 Heng Shan Road · Suzhou 215009 · Jiangsu · China
Free hotline: 4006217621 (only in China) · Tel.: +86 512 682 47776 · Email: hbmchina@hbm.com.cn

Europe: Hottinger Baldwin Messtechnik GmbH · Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel.: +49 6151 803-0 · Email: info@hbm.com

measure and predict with confidence

