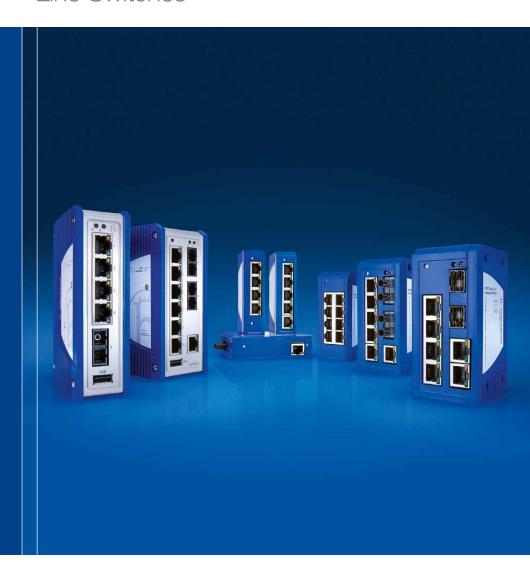


SPIDER III Standard and Premium Line Switches





Be certain. Belden.

Delivering reliable communication – in the harshest environments – through proven Hirschmann technology.

Your needs define Standard or Premium.







Compare Features - Which best meets your needs: Standard or Premium?

Choose from our SPIDER III Standard or Premium series of unmanaged switches. Both are easy to install and will help you maximize your network availability.

SPIDER III STANDARD LINE: Cost-Effective and Compact

The Standard Line delivers increased performance and reduces your costs, while enabling you to take advantage of Ethernet technology.

- Designed especially for reliable operation in harsh industrial conditions
- Small size saves space in tight areas and makes installation simple and fast
- High data throughput achieved by Gigabit data speeds, while fiber communication options ensure long-term scalability
- Reduces overall lifecycle costs with low power consumption



The SPIDER III Premium switches expand on the benefits of the Standard Line offerings by adding configurable switch functionality typically only found in managed switches. Plus, you'll find additional hardware options and expanded industrial certifications for broader deployment in what matters – your applications. Easy installation and customization of each switch's ports for specific applications through the SPIDER's USB port and free stand-alone software tool.

- Withstands extreme industrial conditions due to an extended temperature range, a ruggedized metal housing and an optional conformal coating which protects the electronics against dust, humidity and noxious gases.
- · Meets additional industry standards and approvals, including those for transportation, process automation and marine applications.





		Standard Line	Premium Line
Ports	Max. Port Count	8	9
	Fast Ethernet Ports TX/FX	Up to 8/2	Up to 9/3
	Gigabit Ethernet Ports TX/FX	Up to 8/2	Up to 8/1
PoE	PoE Ports	-	4 (Q4 2016)
Power Supply	Redundant Power Input	-	✓
	Standard Voltage Power Supply	12/24 V DC	12/24 V DC
	Extended Voltage Power Supply	-	12/24/48 V DC, 24 V AC (optional)
Engloqueo	Dimensions (W x H x D – w/o Terminal Block)	26/38 x 102 x 79 mm, 45 x 110 x 88 mm	39/49/56 x 135 x 117 mm
Enclosure	Protection Class, Material	IP30, plastic	IP40, metal
_	Standard	0 °C to +60 °C	-
Temperature Range	Extended	-40 °C to +70 °C *	-40 °C to +70 °C
naliye	Conformal Coating	-	√ (optional)
	Plug-in Terminal Block (Screw Clamps Standard, Spring Clamps are Optional)	✓	√
Interfaces	Fault Relay (Power, Port Break)	-	1
	USB Port for Configuration	-	√ **
	Jumbo Frames (up to 9014 Bytes)	-	✓
	Quality of Service (QoS)	-	✓
Faaturaa	Energy Efficient Ethernet (IEEE 802.3az)	-	✓
Features	Disable Unused Ports	-	✓
	Broadcast/Multicast Storm Protection	-	✓
	PROFINET CC-A Compliant	-	✓
	Safety	EN 60950-1, EN 61131-2, cUL61010-1/-2-201	EN 60950-1, EN 61131-2, cUL61010-1/-2-201
Approvals	Ship		GL, DNV
	Hazardous Locations	-	ISA12.12.01 C1D2, ATEX Zone 2
	Transportation	-	EN 50121-4, E1
	Substation		IEC 61850-3, IEEE 1613 ***

^{*} Applies only for SPIDER-SL-20-05T1999999, SPIDER-SL-20-08T1999999, SPIDER-SL-20-04T1M29999, SPIDER-SL-20-04T1M49999
** Doesn't apply for media converters • *** Applies only for media converters



Markets and Applications



SPIDER III Standard Line switches are suitable for both harsh environments and applications in which switch management is unnecessary. This makes them the ideal choice for the OEM machine manufacturing industry where reliability and cost-effectiveness are the driving decision makers.

The Premium Line offers similar port densities and media mixes, but meet a broader range of market-specific certifications, standards and approvals. Approvals include those for use in process industries (ISA12.12.01 and ATEX Class 2), transportation applications (EN 50121-4 and E1) and marine applications (Navy GL and DNV). In addition the switches fulfill PROFINET Conformance Class A requirements to set up PROFINET networks.





Premium Line

Manufacturing and Machine Building

Due to the increasing amount of Ethernetbased field devices like sensors and actuators, there is a need for Industrial Ethernet switches with a higher port count and data rates at the field level. The SPIDER III standard switches utilize the latest Hirschmann technology to create a cost-effective way to take advantage of the Ethernet. Furthermore the compact design of the switches saves spaces in tight areas, such as cabinets.

Transportation

With a lot of market-specific certifications, the Premium Line switches are not only ideal for manufacturing and machine building, but also for transportation applications.

- EN 50121-4 for use on railway lines
- E1 for use in road vehicles
- GL and DNV approval for marine applications





Automation

The Standard Line switches employ a plug-and-play principle that allows for easy installation without compromising quality or reliability. And the low power consumption allows for the reduction of overall lifecycle costs.

Hazardous Locations

The premium switches are designed for the special requirements of process automation. They meet the relevant industry standards (e.g. ISA12.12.01 C1D2 and ATEX, Zone 2), provide very high operational reliability even under extreme conditions, and also long-term reliability and flexibility.



Physical Security

Due to Gigabit speed the SPIDER switches can quickly transmit large volume of data at high speed. This increased performance results in uninterrupted and smooth communication.



USB Configuration Interface

The Hirschmann SPIDER III Premium switches come with a USB interface that allows for quick customization of individual port parameters. The easy-to-use Switch Programing Tool makes it easy to generate a configuration file and transfer it to a switch using a USB drive. This free application is available for both Windows and Linux operating systems. And it's portable so it doesn't require any installation.

In order to document the configuration of a particular switch, the Switch Programming Tool can also export a detailed configuration report in PDF format. Plus, you can download the running configuration of a switch and open it with the Switch Programming Tool so the configuration can be read and edited.



Four Easy Steps to Configure a Premium Switch

- 1. Use the Switch Programming Tool to configure all switch and port parameters. 3. Connect the USB drive to the switch.
- 2. Save the configuration file to a USB drive.

- **4.** Power-cycle the switch to transfer and apply the new configuration.

Benefits

- Turn off unused ports to help secure the network.
- Use the potential free-fault relay contact to supervise redundant power status or any port's link status without management software.
- During periods of heavy traffic the flow control mechanism which acts as an overload protection for the device holds off additional traffic from the network and ensures that no data packets are lost.
- Activate Broadcast and/or Multicast Storm protection to limit traffic on the ports when Broadcast or Multicast data packets flood the device.
- Enable or disable the transmission of large data packets (jumbo frames) to increase network efficiency.
- Eliminate duplex mismatch errors by matching Auto-Negotiation, Speed and Duplex Mode parameters to the end device settings.
- Use the Quality of Service function to prevent time-critical data traffic (language, video or real-time data) from being disrupted by less timecritical data traffic during periods of heavy traffic. By enabling this feature the switches can be applied in PROFINET conformance class A applications.
- Regulate energy efficiency depending on network traffic through the Energy Efficient Ethernet standard. Save energy by operating the physical layer of a link in low power mode when there is no traffic to send.

Overview of Configurable Parameters

	Parameter	Values
	Power Supply Unit 1/2 Alarm	Enable/Disable
Global	Aging Time	0s 1048575s
Giobai	QoS 802.1 D/p Mapping	VLAN Priority 0 7, Traffic Class 0 3
	QoS DSCP Mapping	DSCP value 0 63, Traffic Class 0 3
	Port State	On/Off
	Flow Control	On/Off
	Link Alarm	On/Off
	Broadcast Mode	On/Off
Per Port	Broadcast Threshold	0% 100%
Per Port	Multicast Mode	On/Off
	Multicast Threshold	0% 100%
	Jumbo Frames	On/Off
	QoS Trust Mode	Untrusted, TrustDot1p, TrustIpDscp
	Port Priority	0 7
	Auto-Negotiation	On/Off
	Speed	10 Mbit/s, 100 Mbit/s
Per TX Port	Duplex Mode	FDX/HDX
Pel IX Pull	Auto-Crossing	On/Off
	MDI State	MDI, MDI-X
	Energy Efficient Ethernet	On/Off
Per FX Port	Duplex Mode	FDX/HDX



The stand-alone SPIDER Switch Programming Tool runs without installation (even from a USB drive), allowing for the customization of each individual



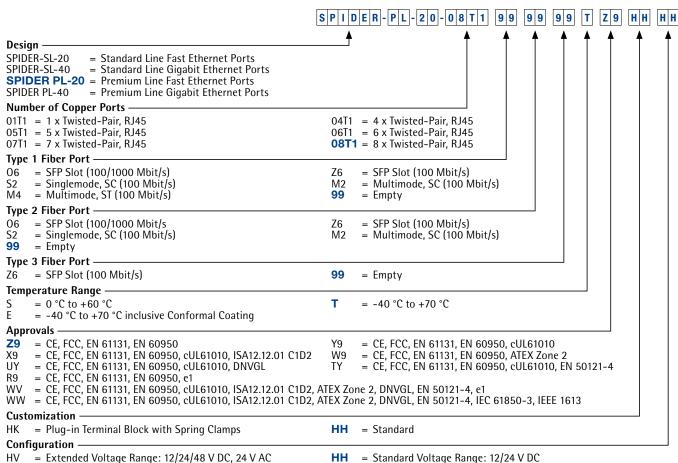
Technical Information - SPIDER III Standard and Premium Line Switches

Product Description			
Туре	SPIDER III Standard Line Switches	SPIDER III Premium Line Switches	
Description	Unmanaged, Industrial ETHERNET Rail Switch, fanless design, store and forward switching mode, electrical and optical Fast-Ethernet (10/100 MBit/s) and Gigabit-Ethernet (10/100/1000 MBit/s), IP30 plastic housing	Unmanaged, configurable Industrial ETHERNET Rail Switch, fanless design, store and forward switching mode, electrical and optical Fast-Ethernet (10/100 MBit/s) and Gigabit-Ethernet (10/100/1000 MBit/s), USB port for configuration, IP40 metal housing	
Port Type and Quantity	Up to 8 FE or GE ports, thereof max. 2 FE or GE FX ports	Up to 9 FE or 8 GE ports, thereof max. 3 FE or 1 GE FX ports	
Interfaces			
Power Supply/Signaling Contact	1 x plug-in terminal block, 3-pin, with spring clamps	1 x plug-in terminal block, 6-pin, with spring clamps	
USB Interface	n/a	1 x USB for configuration	
Power Requirements			
Operating Voltage	12/24 V DC (9.6 to 32 V DC)	12/24/48 V DC (9.6 to 60 V DC), 24 V AC, redundant	
Current Consumption at 24 V DC	Max. 555 mA depending on the variant	Max. 360 mA depending on the variant	
Power Consumption	1.3 to 13.3 W depending on the variant	2.4 to 9.0 W depending on the variant	
Service			
Diagnostics	LEDs (power, link status, data)	LEDs (power, link status, data), Fault Relay	
Configurable Parameters	n/a	Global settings: power supply unit alarm, aging time, QoS 802.1p mapping, QoS DSCP mapping Port settings: flow control, port state, broadcast mode/threshold, multicast mode/threshold, QoS Trust Mode, port priority, link alarm TX port settings: auto-negotiation, speed, duplex mode, auto-crossing, MDI state, energy efficient ethernet FX port settings: duplex mode	
Ambient Conditions			
Operation Temperature	0 °C to +60 °C, -40 °C to +70 °C (depending on the variant)	-40 °C to +70 °C	
Storage/Transport Temperature	-40 °C to +85 °C		
Relative Humidity (non-condensing)	10% to 95%		
Protective Paint on PCB	n/a	Conformal Coating	
Mechanical Construction			
Dimensions (W x H x D)	26/38 x 102 x 79 mm, 45 x 110 x 88 mm (w/o terminal block) depending on the variant	39/49/56 x 135 x 117 mm (w/o terminal block) depending on the variant	
Mounting	DIN Rail, Wall Mounting (requires a Mounting Plate)		
Weight	100 g to 250 g depending on the variant	400 g to 510 g depending on the variant	
Protection Class	IP30 (plastic housing)	IP40 (metal housing)	
Mechanical Stability			
IEC 60068-2-27 Shock	15 g, 11 ms duration, 18 shocks		
IEC 60068-2-6 Vibration	3.5 mm, 5 Hz to 8.4 Hz, 10 cycles, 1 octave/min. 1 g, 8.4 Hz to 150 H	z, 10 cycles, 1 octave/min.	
EMC Interference Immunity			
EN 61000-4-2 Electrostatic Discharge (ESD)	4 kV contact discharge, 8 kV air discharge		
EN 61000-4-3 Electromagnetic Field	10 V/m (80 to 1000 MHz)		
EN 61000-4-4 Fast Transients (Burst)	2 kV power line, 4 kV data line		
EN 61000-4-5 Surge Voltage	Power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line		
EN 61000-4-6 Conducted Immunity	10 V (150 kHz to 80 MHz)		
EMC Emitted Immunity			
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A		
EN 55022	EN 55022 Class A		
Approvals			
Safety of Industrial Control Equipment	CUL 61010-1/61010-2-201		
Hazardous Locations	n/a	ISA12.12.01 Class 1 Div. 2, ATEX Class 2	
Ship	n/a	Germanischer Lloyd, DNV	
		-	
Railway	n/a	EN 50121-4	
Railway Road Vehicles	n/a n/a	E1 E1	

 $\textbf{NOTE:} \ These \ are \ the \ prominent \ technical \ specifications. \ For \ complete \ technical \ specifications \ visit: \ www.hirschmann.com$



SPIDER III Standard and Premium Line Switch Configurations



Order Code	Product Code	Description
942132001	SPIDER-SL-20-05T1999999SY9HHHH	5 x 10/100Base-TX
942132016	SPIDER-SL-20-05T1999999TY9HHHH	5 x 10/100Base-TX*
942132002	SPIDER-SL-20-08T1999999SY9HHHH	8 x 10/100Base-TX
942132017	SPIDER-SL-20-08T1999999TY9HHHH	8 x 10/100Base-TX*
942132003	SPIDER-SL-40-05T1999999SY9HHHH	5 x 10/100/1000Base-T
942132004	SPIDER-SL-40-08T1999999SY9HHHH	8 x 10/100/1000Base-T
942132005	SPIDER-SL-20-01T1M29999SY9HHHH	1 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942132006	SPIDER-SL-20-01T1S29999SY9HHHH	1 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942132007	SPIDER-SL-20-04T1M29999SY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942132018	SPIDER-SL-20-04T1M29999TY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-SC*
942132008	SPIDER-SL-20-04T1M49999SY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-ST
942132019	SPIDER-SL-20-04T1M49999TY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-ST*
942132009	SPIDER-SL-20-04T1S29999SY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942132010	SPIDER-SL-20-06T1M29999SY9HHHH	6 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942132011	SPIDER-SL-20-06T1S29999SY9HHHH	6 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942132012	SPIDER-SL-20-06T1M2M299SY9HHHH	6 x 10/100Base-TX, 2 x 100Base-FX, MM-SC
942132013	SPIDER-SL-20-06T1S2S299SY9HHHH	6 x 10/100Base-TX, 2 x 100Base-FX, SM-SC
942132014	SPIDER-SL-40-06T1069999SY9HHHH	6 x 10/100/1000Base-T, 1 x FE/GE SFP slot
942132015	SPIDER-SL-40-06T1060699SY9HHHH	6 x 10/100/1000Base-T, 2 x FE/GE SFP slot

Common SPIDER III Standard and Premium Line Switch Configurations

Order Code	Product Code	Description
942141016	SPIDER-PL-20-05T1999999TY9HHHH	5 x 10/100Base-TX
942141017	SPIDER-PL-20-08T1999999TY9HHHH	8 x 10/100Base-TX
942141019	SPIDER-PL-40-05T1999999TY9HHHH	5 x 10/100/1000Base-T
942141020	SPIDER-PL-40-08T1999999TY9HHHH	8 x 10/100/1000Base-T
942141022	SPIDER-PL-20-01T1M29999TY9HHHH	1 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942141023	SPIDER-PL-20-01T1S29999TY9HHHH	1 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942141024	SPIDER-PL-20-04T1M29999TY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942141025	SPIDER-PL-20-04T1M49999TY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, MM-ST
942141026	SPIDER-PL-20-04T1S29999TY9HHHH	4 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942141027	SPIDER-PL-20-06T1Z6Z6Z6TY9HHHH	6 x 10/100Base-TX, 3 x FE SFP slot
942141028	SPIDER-PL-20-08T1M29999TY9HHHH	8 x 10/100Base-TX, 1 x 100Base-FX, MM-SC
942141029	SPIDER-PL-20-08T1S29999TY9HHHH	8 x 10/100Base-TX, 1 x 100Base-FX, SM-SC
942141030	SPIDER-PL-20-07T1M2M299TY9HHHH	7 x 10/100Base-TX, 2 x 100Base-FX, MM-SC
942141031	SPIDER-PL-20-07T1S2S299TY9HHHH	7 x 10/100Base-TX, 2 x 100Base-FX, SM-SC
942141033	SPIDER-PL-40-01T1069999TY9HHHH	1 x 10/100/1000Base-T, 1 x FE/GE SFP slot
942141034	SPIDER-PL-40-04T1069999TY9HHHH	4 x 10/100/1000Base-T, 1 x FE/GE SFP slot

* = Extended temperature range

GLOBAL LOCATIONS

For more information, please visit us at: www.belden.com



Be certain you stay in touch.

UNITED STATES

Division Headquarters - Americas

2200 U.S. Highway 27 South Richmond, IN 47374

Phone: 765-983-5200 Inside Sales: 800-235-3361

Fax: 765-983-5294 info@belden.com www.belden.com

Belden

2200 U.S. Highway 27 South Richmond, IN 47374a

Inside Sales: 1-800-BELDEN-1 (1-800-235-3361)

Phone: 765-983-5200 Fax: 765-983-5294 info@belden.com

Industrial Networking

(Hirschmann/GarrettCom/ Tofino Security)

255 Fourier Ave. Fremont, CA 94539, USA

Phone: 510-438-9071 Fax: 510-952-3456 www.belden.com

gciepofr@belden.com

CANADA

National Business Center

2280 Alfred-Nobel Suite 200 Saint-Laurent, QC Canada H4S 2A4

Phone: 514-822-2345 Fax: 514-822-7979

LATIN AMERICA and the CARIBBEAN ISLANDS

Regional Office 6100 Hollywood Boulevard

Suite 110 Hollywood, Florida 33024

Phone: 954-987-5044 Fax: 954-987-8022 salesla@belden.com

EUROPE/MIDDLE EAST/AFRICA

Division Headquarters – EMEA Edisonstraat 9

5928 PG Venlo, 5900 AA, Postbus 9 The Netherlands

Phone: +31-773-878-555 Fax: +31-773-878-448 venlo.salesinfo@belden.com www.beldensolutions.com

Regional Offices

Manchester International Office Centre, Suite 13 Styal Road Manchester M22 5WB **United Kingdom**

Phone: +44-61-4983749 Fax: +44-161-4983762 manchester.salesinfo@belden.

Location Neckartenzlingen -Stuttgarter Straße 45-51 72654 Neckartenzlingen Germany

Phone: +49-(0)-712714-0 Fax: +49-(0)-7127/14-1313 inet-sales@belden.com

ASIA-PACIFIC

Division Headquarters – APAC

7/F Harbour View 2 16 Science Park East Avenue Hong Kong Science Park Shatin, Hong Kong

Phone: 852-2955-0128 Fax: 852-2907-6933 hongkong.sales@belden.com

Regional Offices

Unit 301 No. 19 Building, 1515 Gu Mei Road Caohejing High-tech Park Shanghai 200233 People's Republic of China

Phone: 021-54452388 Fax: 021-54452366/77 hongkong.sales@belden.com

101 27 International Business Park #05-01 iQuest @ IBP Singapore 609924

Phone: 65-6879-9800 Fax: 65-6251-5010 singapore.sales@belden.com

Belden, Belden Sending All The Right Signals, GarrettCom, Hirschmann, Lumberg Automation, Tofino Security, Tripwire and the Belden logo are trademarks or registered trademarks of Belden Inc. or its affiliated companies in the United States and other jurisdictions. Belden and other parties may also have trademark rights in other terms used herein.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for hirschmann manufacturer:

Other Similar products are found below:

931298001 GSP 211 PG11 934828001 BRSCIS 4D/9 930011200 MAB 6 932326100 CA 6 GS G 30 KW 3 M 831530400 CA 00 SD 1 934077105 934066788 934061103 934059104 930046100 975090703 943301-001 934061704 STAK2 PRUEF1SW SPIDER-PL-20-05T1999999TZ9HHHH BAT867-RUSW99AU999AT199L999ZHX 930136106 930317804 934066105 934076103 934086104 934086188 973929000 934157101 934077106 934064104 932794001 973601101 GECKO 4TX 972309101 934100707 975455709 975455701 973528101 931297006 MESAP 43650 932140100 STAK 3 N SCHWARZ 932507005 XZC 0704 975694707 MLSWG100/2.5RT BAT867-RUSW99CU999AT199L999ZHX 934081100 934089101 934090100 973929001 975017701 975106101 934157100