HIRSCHMANN
A **BELDEN** BRAND

PB00128HE

GECKO Switches from Hirschmann

The GECKO Industrial Ethernet switches guarantee reliable data communication and enhanced redundancy and diagnostic features. They also offer easy-to-implement management functionality at an outstanding price-performance ratio.

The GECKO switches were designed with functional essentials in mind, while also offering enhancements for redundancy and diagnostics. They can minimize downtime to boost the profitability of production processes. What's more, the GECKO switches set new standards for low power consumption.

- Fast network reconfiguration and simple error diagnosis ensure smooth production workflows
- Higher machine uptime thanks to simple commissioning through an intuitive web interface, or by utilizing the HiDiscovery configuration tool and Industrial HiVision network management software
- Reduced costs due to lower power consumption and an outstanding price-performance ratio

With a combination of managed and unmanaged switches, the GECKO switches are ideally suited for use in smaller networks, or on the edge of larger installations. They can also be used for carrying video signals or transmitting control data.

For industrial manufacturers looking for a cost-effective way of entering the world of managed switches, the GECKO switches offer simple network management and enhanced network availability. Network parameters can be centrally configured using a web interface, while redundancy and diagnostic functions ensure high network availability.

Applications

In designing the GECKO switches, the absolute necessary management functions were integrated to enable the configuration and monitoring of the switches.

This concept allows the GECKO switches to bring added value to areas where unmanaged switches cannot deliver the required performance. They can also be used when fully-managed switches are not needed, due to superfluous functionality or complex operation.

With their compact, yet robust design, the GECKO switches can be used in a wide range of areas, from solar farms to production lines in the food and beverage sector. Potential application scenarios include machine and plant engineering, material handling, robotics and connecting production cells for various industries. No matter where they are installed, the GECKO switches guarantee reliable data communication.

Customer benefits

If you have been reluctant to use managed switches because of their complex operation, then the GECKO switches are the ideal alternative. With the proper level of management functionality included, you can configure and monitor the switches without needing any special IT know-how. In addition, commissioning is also very simple in comparison to fully-managed switches, enabling you to be up and running in no time.

What's more, the redundancy functionality of the GECKO switches ensure that your production processes don't grind to a halt even in the event of a data communication error. Due to their low power consumption, the switches also help cut long-term operating costs.

**A new product to serve your needs.
Be certain.**

The GECKO Industrial Ethernet switches provide security, diagnostic and redundancy functions at a price competitive to managed switches, without the complex operation.

GECKO 4TX and GECKO 5TX from Hirschmann

Featuring four or five Fast Ethernet ports (10/100 Mbit/s) and the ability to mount on a DIN rail, the compact dimensions (25 x 114 x 79 mm) of the GECKO switches require little space and in-active ports can be disabled to protect against possible misuse.

The switches can be managed through Simple Network Management Protocol (SNMP) or via HiDiscovery and Industrial HiVision from Hirschmann. A web interface for HyperText Transfer Protocol Secure (HTTPS) deployment is also available. For monitoring purposes, the switches provide diagnostic and documentation options, such as a system log, Remote Monitoring (RMON) and Link Layer Discovery Protocol (LLDP). Rapid Spanning Tree Protocol (RSTP) and Quality of Service (QoS) functions are also supported.

Additional features include an IP30 protection rating, a wide operating temperature range, high resistance to shocks and vibration, and a 24 V DC power supply. What's more, with a power consumption of less than 3 W, the GECKO switches require minimal electricity.

Benefits at a glance

- Outstanding price-performance ratio thanks to the Lite Management concept
- SNMP and HiDiscovery/Industrial HiVision, plus a web interface, ensure fast and convenient administration
- RSTP guarantees reliable data communication
- Longer machine uptime due to simple installation and commissioning
- A range of diagnostic functions ensures fast identification of errors, resulting in smooth production processes
- Reduced operating costs due to low power consumption
- Space-saving installation from a compact design
- A wide range of application scenarios due to robust characteristics (i.e., resistance to shocks and vibration, operating temperature range from 0°C to +60°C and IP30 protection rating)
- 24 V DC power supply
- Ideally combined with Ethernet cable from Belden®

Technical Information

Product Description		
Type	GECKO 4TX	GECKO 5TX
Description	Lite Managed Industrial ETHERNET Rail-Switch, Ethernet/Fast-Ethernet Switch, Store and Forward Switching Mode, fanless design	
Port type and Quantity	4 x 10BASE-T/100BASE-TX, TP-cable, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity	5 x 10BASE-T/100BASE-TX, TP-cable, RJ45-sockets, auto-crossing, auto-negotiation, auto-polarity
Order No.	942 104-001	942 104-002
More Interfaces		
Power supply/Signaling contact	1 plug-in terminal block, 3-pin, no signaling contact	
Network Size - Length of Cable		
Twisted Pair (TP)	0 - 100 m	
Multimode fiber (MM) 50/125 µm	n/a	
Multimode fiber (MM) 62,5/125 µm	n/a	
Singlemode fiber (SM) 9/125 µm	n/a	
Singlemode fiber (LH) 9/125µm (long haul transceiver)	n/a	
Network Size - Cascadibility		
Line - / Star topology	Any	
Power Requirements		
Operating Voltage	12/24 V DC (9.6 to 32 V DC)	
Current Consumption at 24 V DC	Max. 71 mA	
Power Consumption	Max. 1.8 W, 6.1 Btu (IT) h	
Software		
Management	Web-Interface, TFTP config file/firmware transfer, SNMP V1/V2/V3	
Diagnose	Device status indication (LEDs), Log-File, RMON (1) statistics, Simple interface statistics, Topology Discovery according to IEEE 802.1AB (LLDP)	
Configuration	BOOTP/DHCP, DHCP Option 82, HiDiscovery	
Security	SNMPv3 (authNoPriv), Possibility to disable each port	
Redundancy functions	RSTP (IEEE 802.1D-2004)	
Filter	TOS/DSCP prioritization (Mapping TOS/DSCP to 802.1D/p), Prioritization through 4 queues, Static unicast/multicast filter entries (up to 100)	
Ambient Conditions		
Operating Temperature	0°C to +60°C	
Storage/Transport Temperature	-40°C to +85°C	
Relative Humidity (non-condensing)	5% to 95%	
Mechanical Construction		
Mounting	DIN Rail	
Protection Class	IP30	
Dimensions (WxHxD)	25 mm x 114 mm x 79 mm	
Weight	100 g	110g
Approvals		
Safety of Industrial Control Equipment	cUL 61010-1 (previously cUL 508)	
Reliability		
MTBF	56,6 years	54,1 years
Warranty	5 years (standard)	
Scope of Delivery and Accessories		
Scope of Delivery	Device, terminal block, start-up instructions	
Accessories to order separately	Rail power supply RPS 30, RPS 80 EEC or RPS 120 EEC (CC)	

Belden Competence Center

As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge play a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses, from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products from Belden, GarrettCom, Hirschmann, Lumberg Automation and Tofino Security.

Irrespective of the technology you use, you can rely on our full support – from implementation to optimization of every aspect of daily operations.

Always Stay Ahead with Belden

In a highly competitive environment, it is crucial to have reliable partners who add value to your business. When it comes to signal transmissions, Belden is the No. 1 solutions provider. We know your business and want to understand your specific challenges and goals to show how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our five leading brands, Belden, GarrettCom, Hirschmann, Lumberg Automation and Tofino Security, we are able to offer the integrated solution you need. Today, it may be a single cable, switch or connector, to solve a specific issue; tomorrow, it can be a complex range of integrated applications, systems and solutions. With the rise in smart, connected devices brought on by the Industrial Internet of Things (IIoT), together, we can make sure your infrastructure is ready to handle and make sense of the influx of data. Transform your business now with instant access to information, and make your vision a reality. Visit **info.belden.com/iiot** to learn more.

About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

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