

# Product Bulletin

#### **PB 1093HE**

# GECKO 4TX from Hirschmann™

The new GECKO 4TX industrial Ethernet switch guarantees reliable data communication and enhanced redundancy and diagnostic features. It also offers easy-to-implement management functionality at an outstanding price-performance ratio.



The GECKO was designed with functional essentials in mind, while also offering enhancements for redundancy and diagnostics. It can minimize downtime to boost the profitability of production processes. What's more, the GECKO 4TX sets 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 priceperformance ratio

With a combination of managed and unmanaged switches, the GECKO 4TX is ideally suited for use in smaller networks, or on the edge of larger installations. It can also be used for carrying video signals or transmitting control data.

For industrial manufacturers looking for a costeffective way of entering the world of managed switches, the GECKO 4TX offers 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 4TX, 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. It can also be used when fully-managed switches are not needed, due to superfluous functionality or complex operation.

With its compact, yet robust design, the GECKO 4TX 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 it's installed, the GECKO 4TX guarantees reliable data communication.

#### **Customer benefits**

If you have been reluctant to use managed switches because of their complex operation, then the GECKO 4TX is the ideal alternative. With the proper level of management functionality included, you can configure and monitor the switch 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 4TX ensures that your production processes don't grind to a halt even in the event of a data communication error. Due to its low power consumption, the switch also helps cut long-term operating costs.

A new product to serve your needs. Be certain.



#### **GECKO 4TX from Hirschmann™**



Featuring four Fast Ethernet ports (10/100 Mbit/s) and the ability to mount on a DIN rail, the compact dimensions ( $25 \times 114 \times 79 \text{ mm}$ ) of the GECKO 4TX require little space and in-active ports can be disabled to protect against possible misuse.

The switch 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 switch provides 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 requires minimal electricity.

The GECKO 4TX industrial Ethernet switches provide security, diagnostic and redundancy functions at a price competitive to managed switches, without the complex operation.

#### 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®







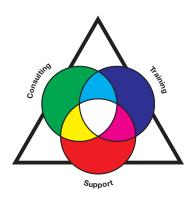
# **Technical Information**

Product Description	
Туре	GECKO 4TX
Description	Lite Managed Industrial ETHERNET Rail-Switch, Ethernet/Fast-Ethernet Switch, Store and Forward Switching Mode, fanless design
Port type and Quantity	4 x 10/100BASE-TX, TP-cable, RJ45 sockets, auto-crossing, auto-negotiation, auto-polarity
Order No.	942 104-001
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	DC 9.6 V - 32 V
Current Consumption at 24V DC	120 mA
Power Consumption	2,9 W
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 according to 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
Approvals	
Safety of Industrial Control Equipment	CUL 61010-1 (previously CUL 508)
Reliability	
MTBF	23 years
Warranty	5 years (standard)
Scope of Delivery and Accessories	
Scope of Delivery	Device, terminal block, operating manual
Accessories	Rail power supply RPS 30, RPS 80 EEC or RPS 120 EEC (CC)

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## The 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 the implementation to the 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 are able to add value to your business. When it comes to signal transmissions, Belden is the number one solutions provider. We understand your business and want to know your specific challenges and targets to see 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 solution you need. Today it may be a single cable, a switch or a connector, thus solving a specific issue; tomorrow it can be a complex range of integrated applications, systems and solutions.

#### **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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