

Operating System HiOS

Hirschmann upgrades HiOS software to increase the power and performance of its Industrial Ethernet switches.

HiOS software offers intelligent and unique combinations of network redundancy protocols to meet every physical and application requirement.



Redundancy – an extensive number of standardized and proprietary redundancy mechanisms to meet any requirement.



Security – comprehensive security functionality to help you secure your networks.



Ease of Use – an intuitive graphical interface, comprehensive command line interface, and full SNMP support meet every management challenge.

Key Features

- A combination of standards-based protocols and FuseNet coupling protocols results in a high level of fault tolerance
- PRP over Gigabit is now available for existing hardware. Only a software update is required
- The incorporation of Classic Switch Software functions into HiOS ensures that existing networks can continue to be expanded many years into the future
- Easy Access Control Lists allow control of what data crosses a network, even in standard switches
- Address Translation: 1:1 NAT allows the connection of networks that use identical subnets
- HiOS supports the new 2.5 Gbit/s transmission rate. This provides faster speed without a significant increase in power consumption or heat generation. When used with Link Aggregation, it results in high speed data uplinks, at a significantly lower cost than 10 Gbit/s

HiOS
Hirschmann™ Operating System



The user-friendly Industrial HiVision network management software offers extensive configuration and monitoring functionality, both for products with installed HiOS software and for third-party devices.

**Be certain.
Belden.**



HiOS

Hirschmann™ Operating System



With HiOS you have access to the industry's widest range of standard functions and special features for the automation sector.



Your Benefits

Highest availability and Data Security In One

The Hirschmann Operating System (HiOS) is well known as an operating system with unique redundancy and security features that enable it to provide high network availability and data security for efficient production processes. Network Address Translation increases the network deployment options. Extended backwards compatibility with devices running Classic Switch Software means that existing networks can be operated, maintained and expanded well into the future using HiOS-based components.

Easy Access Control Lists provide granular network security to devices using Layer 2 Standard (L2S) software. Extensive new design combinations such as Media Redundancy Protocol (MRP) sub rings with Link Aggregation are available for the higher value Layer 2 Advanced (L2A) switches. 1:1 NAT now runs on the RSP, RSPE (Expandable) and OCTOPUS Layer 3 switches.

HiOS supports FuseNet, the "Fusion of Networks". FuseNet uniquely identifies a family of redundant coupling protocols which are proprietary to Hirschmann. These protocols provide great flexibility in the way networks can be redundantly coupled, to suit every topology.

HiOS provides extensive redundancy mechanisms to your state-of-the-art hardware. It adds Parallel Redundancy Protocol (PRP) over Gigabit, Rapid Spanning Tree Protocol (RSTP) over High Availability Seamless Redundancy (HSR), RSTP Ring-Only Mode and FuseNet network coupling protocols for maximum network uptime.

The latest Transport Layer Security (TLS) libraries enhance the security of network communication. The ability to disable unused slots on modular devices hinders unauthorized network access. Out-Of-Band management via a dedicated RJ45 port on the new GREYHOUND 1040 means that the devices can be managed even during high Central Processing Unit (CPU) load, for example if a network loop occurs.

HiOS also extends the range of applications for the latest generation of Industrial Ethernet products from Hirschmann. From cabling through switches and routers, supplemented by WLAN, firewalls and network management software, a seamless high availability solution for state-of-the-art automation networks is now available from a single supplier.

HiOS is focussed on redundancy technologies for maximum network availability. Devices running L2A software onwards offer unrestrained network topology design based on a combination of standards-based redundancy protocols and FuseNet coupling protocols.

Applications

The Hirschmann switches in the RSP, RSPL (Lite), RSPS (Smart), RED, Embedded Ethernet (EES) families, and OCTOPUS series, as well as the modular MSP, RSPE (Expandable) and GREYHOUND systems, are ideally suited to virtually any application that calls for maximum network availability.

Markets

HiOS was developed specifically to meet the requirements of the automation sector. Examples include:

- Automotive production
- Transportation
- Power transmission and distribution