HiOS is an entirely new operating system for Industrial Ethernet, combining high performance with robust security. It permits the use of intelligent infrastructures in time-critical applications that were previously a ‘hard-wired’ domain via new point-to-point connection technology.

With zero switchover time, the PRP (Parallel Redundancy Protocol) and HSR (High-Availability Seamless Redundancy) redundancy methods ensure smooth production processes. Comprehensive security mechanisms protect networks against attacks and operating errors.

**Objective**

In a professional environment the participants receive in-depth knowledge about the Hirschmann Operating System (HiOS) Layer 2 functionality of the various RSP variants, MSP, GREYHOUND, EES, BOBCAT, DRAGON MACH and Octopus II/III devices. This includes installation, commissioning, and supervision. The training is part theory and part practice. The necessary knowledge about functions and deployment possibilities of the products are taught in individual theory blocks. Each block is followed by practical exercises, designed to familiarize the participants with the devices through first-hand experience.

**Languages:** HiOSL2e English, HiOSL2d German

**Duration:** 3 Days

**Schedule / Location / Price:**
www.belden.com/resources/training

---

### Target Group

Product training course for System Engineers, Network Designers and Support Technicians.

### Prerequisites

An understanding of Ethernet and TCP/IP, for example “Industrial Ethernet (CT1)” and “Industrial Networking (CT2)” is required. If available, the participant should bring a laptop with Ethernet connection and an operating system CD. Administrator rights are required.

### Seminar Content

#### Basic Settings
- Software management
- Configuration management
- External Memory

#### Switching
- Port configuration
- Rate Limiter
- IGMP
- VLANs
- Quality of Service

#### Device Security
- User Management
- Password Policy
- Management Access
- RADIUS

#### Redundancy
- MRP
- PRP
- HSR
- Rapid Spanning Tree
- Subring
- Link Aggregation
- MRP over LAG
- Linkbackup

#### Network Security
- Port Security
- Denial of Service (DoS)
- Authentication (802.1x)
- Access Control Lists (ACLs)

#### Diagnostics
- Port Mirroring
- Device status
- Security Status
- Topology Discovery
- Configuration check
- Event log
- Persistent Logging
- SFlow

#### Advanced
- DHCP Relay and Server