



# HIRSCHMANN

A **BELDEN** BRAND

## New Product Bulletin

NP 318

### Hirschmann™ Introduces WLAN Controller

Belden® extends its proven Hirschmann BAT program with BAT WLC Controllers - enables the configuration and management of large-scale wireless networks with up to one hundred access points from a central location.



### The new Hirschmann BAT Wireless LAN Controller (WLC) for Centralized Management of Large Wireless LAN (WLAN) Networks

Wireless Local Area Network (WLAN) applications are becoming more prevalent in the field of industrial automation. The new IEEE 802.11n standard enables data rates of up to 300 Mbit/s while simultaneously extending the range and stability of wireless transmissions. Centralized management guarantees secure operation in an industrial network and provides the necessary overview. The new Hirschmann BAT-Controller Wireless LAN Controller (WLC) was especially developed for this purpose.

There is no need to replace Hirschmann access points from the existing range of BAT wireless Ethernet access points. These access points operate with or without controllers - meaning that your WLAN can extend, systematically, and when necessary, supplemented by a Hirschmann BAT-Controller WLC.

BAT-Controller WLC are available in three versions:

- BAT-Controller WLC25, which can manage up to 25 access points
- BAT-Controller WLC50 and BAT-Controller WLC100, which can manage up to 50 and 100 access points respectively.

### Product Features

- Automatic configuration and central management of all the access points in the WLAN
- Compatible with all Hirschmann access points in the BAT families BAT-rail and F
- Full throughput of payload data as per IEEE 802.11n for each access point
- Integrated IP router with firewall
- User authentication compliant with IEEE 802.1x, RADIUS and LEPS
- Roaming possible across a number of subnetworks (in preparation)
- Automatic frequency management in the 2.4 and 5 GHz waveband
- High availability achieved through redundancy and backup mechanisms
- A number of WLAN networks can be linked using the VPN gateway function
- 19" unit for use in control rooms



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The Hirschmann  
BAT-Controller WLC  
guarantees high  
availability for your  
WLAN.

## The Hirschmann™ BAT-Controller WLC

Even while the network is still being set up, the Hirschmann BAT-Controller WLC will locate all its existing access points, check that they have the correct firmware and configure them as appropriate for the current application. This saves the administrator a great deal of work from the very start. While the network is in operation, the BAT-Controller WLC makes all the necessary network information available. In the event that one access point fails, the controller immediately recognizes which device should take over, and links that unit into the network. There is no longer a need for the management software to interrogate data from each individual access point, which reduces the load on the network and makes the information available more quickly.

The BAT-Controller WLC can be used to implement other functions that would not be possible without a complete overview of the WLAN. For example, the network can be set up to minimize overlaps and interference between individual access points. The WLAN Controller can also operate as a centralized firewall and security instance between the cabled part of the network and the wireless part. And the BAT-Controller WLC can also be used as a VPN gateway to link a number of WLAN networks together, even over very great distances. This is particularly valuable for companies who operate at a number of different locations.





Display for status report




V.24 for configuration Inputs

4x100 Mbit/s  
Ethernet Ports

USB Host

The package includes brackets that can be used to mount the unit in a 19" cabinet

## Technical Data

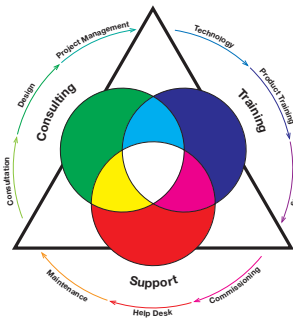
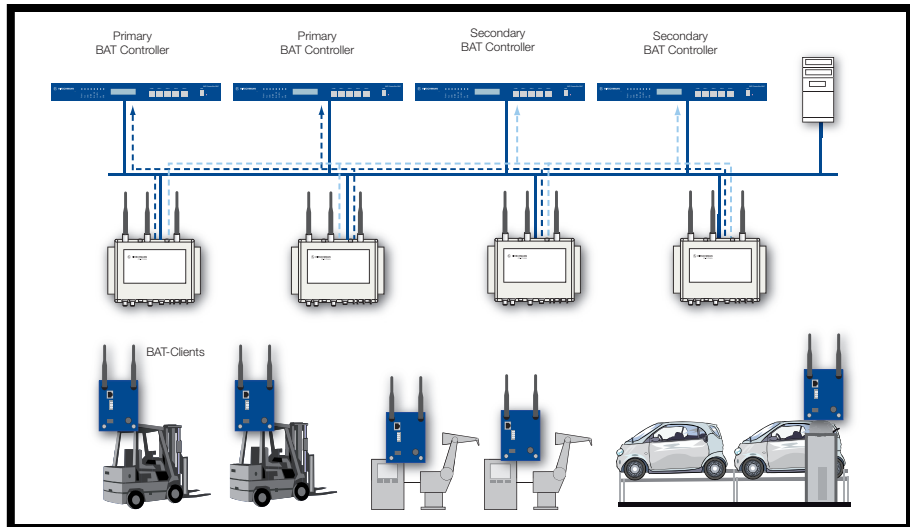
Port-Type and Number			
			
<b>Type</b>	BAT-Controller WLC25	BAT-Controller WLC50	BAT-Controller WLC100
<b>Order Number</b>	942 034-001	942 034-002	942 034-003
<b>Smart Controller Technology</b>	The WLAN Controller uses wireless cell or SSID to support a number of ways of transmitting user data: <ul style="list-style-type: none"> <li>• Bridged directly to the LAN (maximum performance e.g. for 802.11n-based access points)</li> <li>• Strictly separated from the LAN via VLAN (e.g. for WLAN guest access)</li> <li>• Tunnelerd centrally to the controller * (layer 3 tunneling across IP networks)</li> </ul>		
<b>Supported Access Points</b>	All BAT54 and BAT300 access points		
<b>Interfaces</b>	4 individual ports, 10/100/1000 Mbit/s Ethernet		
<b>USB 2.0 Host Port</b>	USB 2.0 high-speed host port for connecting USB printers (USB print server) or serial devices (COM port server) Bidirectional data exchange is also possible (max. 480 Mbit /s)		
<b>Management Software Included</b>	Serial configuration interface / COM port (8 pole mini-DIN): 9,600–115,000 Baud, can be used to connect an analog /GPRS modem		
LANconfig	<ul style="list-style-type: none"> <li>• Configuration program for Microsoft Windows, including a convenient Setup Wizard. Possibilities for group configuration, simultaneous remote configuration and management of several devices via an IP connection (HTTPS, HTTP, TFTP). Project-related, user-related or global default settings for the configuration program. Automatic storage of the current configuration prior to every firmware update. Exchange of configuration files between similar devices, e.g. for migrating old configurations to new BAT products.</li> </ul>		
LANmonitor	<ul style="list-style-type: none"> <li>• Monitoring application for Microsoft Windows for (remote) monitoring and logging of equipment and connection status of BAT devices, including PING diagnostics and TRACE with filters and provision for storing the results in a file. Search and comparison functions for TRACE output. Wizards for standard diagnostics. Export of diagnostic files for support purposes (contain bootlog, system info and device configuration without passwords). Graphical representation of parameters (indicated by appropriate symbols in the LANmonitor view) plus chronological sequence and tabular comparison of minimum, maximum and average values in a separate window, e.g. for transmission and receiving speeds, CPU load, available memory.</li> </ul>		
WLANmonitor	<ul style="list-style-type: none"> <li>• Monitoring application for Microsoft Windows for visualizing and monitoring BAT WLAN installations, including Rogue AP and Rogue Client visualizations</li> </ul>		

\* Feature currently in preparation



## High-availability WLAN Network

Hirschmann access points and clients in the BAT series connect redundantly to the WLAN network via the Hirschmann BAT-Controller WLC. The BAT Controllers connect together redundantly, with the secondary controllers functioning as backup for the primaries. In the event that one controller fails, the other automatically takes over its access points and clients. The access points and clients can continue to operate without connecting to a controller for a period of time that is arbitrarily configurable – making it possible for the exchange of control data between controllers and access points or clients and payload data while passing the data directly to a server.



## The Hirschmann Competence Center

Hirschmann provides an economical end-to-end solution for your network. In addition to its well-known products, Hirschmann also offers a wide range of vendor-independent services - whether it is consulting, training or support. At the Hirschmann Competence Center, you can be sure of tailor-made service from a single supplier.

Whichever technology you use, our experts will support you all the way, from designing your network to optimizing the performance required in the operational phase. Up-to-date manufacturer's expertise, an international service network and fast access to external specialists guarantees you the best possible support. Bundle your individual service package today!

To learn more about the Hirschmann Competence Center or to register for sessions go to: [www.hicomamericas.com](http://www.hicomamericas.com)

### Always the Right Solution

Belden is the world's leading supplier of signal transmission solutions including cable, connectivity and active components for mission-critical applications ranging from industrial automation and alternative power generation through to professional broadcasting. Belden offers an extensive portfolio of highly specialized products for steering, control and field level, which the company produces and markets under its proprietary Belden®, Hirschmann™, and Lumberg Automation™ brands. We would be glad to give you a more personal introduction to our integrated product palette for industrial applications and the worldwide Belden Service

You will find further information and technical details online at [www.hirschmann-usa.com](http://www.hirschmann-usa.com) or contact our Sales Team directly: Tel. 717.217.2299.