



HIRSCHMANN

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Product Bulletin

PB1016HE

Hirschmann™ WLAN Controller

As part of the BAT WLAN Solution portfolio, the latest extension of the BAT WLC Controller now provides seamless, scalable, and secure central management and configuration solutions for up to 1000 access points.



The Hirschmann™ BAT-Controller WLC can be used for centralized management of large WLAN networks

More and more WLAN applications are being used in the field of automation. The IEEE 802.11n standard with the OpenBAT Family enables data rates of up to 450 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 Hirschmann™ BAT-Controller WLC was especially developed for this purpose. There is no need to replace existing Hirschmann™ access points from the BAT range with new devices designed to use controllers – these access points can be operated either with or without controllers. This means that your WLAN can be extended step by step and – when it becomes necessary – supplemented by a Hirschmann™ BAT-Controller WLC.

Hirschmann™ BAT-Controller WLC are available in six versions:

- Hirschmann BAT-Controller WLC25, 50, 100, 200, 500, and 1000. These solutions can be managed from 25 to 1000 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 Family
- Full throughput of payload data as per IEEE 802.11n for each access point
- Integrated IP router with firewall and VPN support
- 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

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



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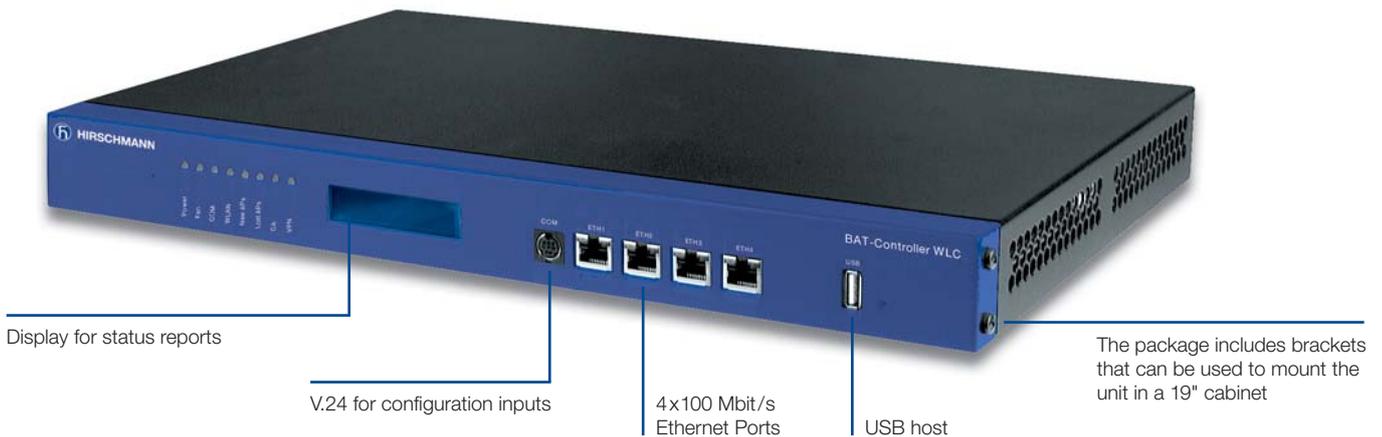
The Hirschmann™
BAT-Controller WLC
guarantees high
availability for your
WLAN.

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 then in operation, the Hirschmann™ 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 any need for the management software to interrogate data from each individual access point. This approach reduces the load on the network and makes the information available more quickly.

You can use the Hirschmann™ BAT-Controller WLC 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 Hirschmann™ 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.





Technical Data

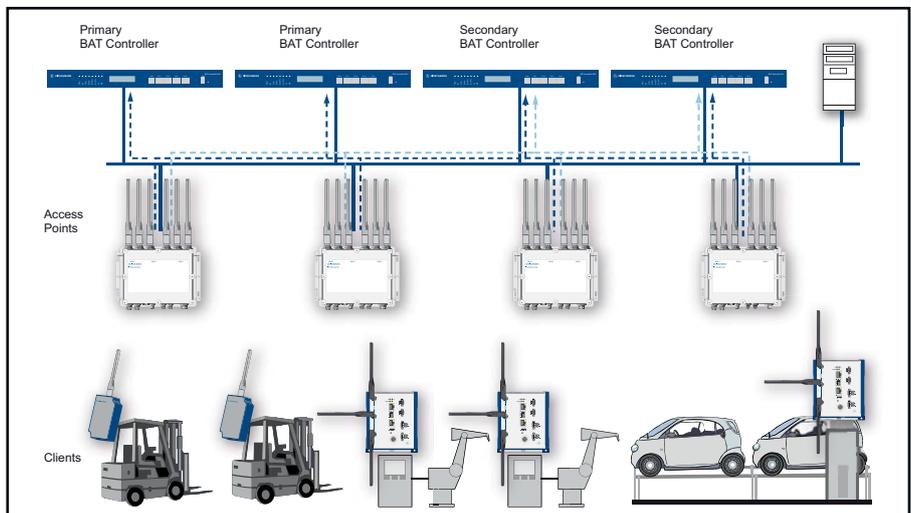
Port-Type and Number						
						
Type	BAT-Controller WLC25	BAT-Controller WLC50	BAT-Controller WLC100	BAT-Controller WLC200	BAT-Controller WLC500	BAT-Controller WLC1000
Order Number	942 034-001	942 034-002	942 034-003	942 034-004	942 034-005	942 034-006
Smart Controller Technology	The WLAN Controller uses wireless cell or SSID to support a number of ways of transmitting user data: <ul style="list-style-type: none"> • Bridged directly to the LAN (maximum performance e.g. for 802.11n-based access points) • Strictly separated from the LAN via VLAN (e.g. for WLAN guest access) • Tunneled centrally to the controller* (layer 3 tunneling across IP networks) 					
Supported Access Points	BAT54, BAT300, and OpenBAT					
Interfaces	4 individual ports, 10/100/1000 Mbit/s Ethernet					
USB 2.0 Host Port	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)					
Serial Interface	Serial configuration interface/ COM port (8 pole mini-DIN): 9,600 to 115,000 Baud, can be used to connect an analog /GPRS modem					
Management Software Included	<ul style="list-style-type: none"> LANconfig <ul style="list-style-type: none"> • 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. LANmonitor <ul style="list-style-type: none"> • 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. WLANmonitor <ul style="list-style-type: none"> • Monitoring application for Microsoft Windows for visualizing and monitoring BAT WLAN installations, including Rogue AP and Rogue Client visualizations 					

* Feature currently in preparation



High-availability WLAN Network

Hirschmann™ access points and clients in the BAT series are connected redundantly to the WLAN network via the Hirschmann™ BAT-Controller WLC. The BAT Controllers themselves are also connected 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, which can also continue to operate without being connected to a controller for a period of time that is arbitrarily configurable. This is possible because only control data is exchanged between controllers and access points or clients; their payload data is passed directly for example to a server.



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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