



HIRSCHMANN

A BELDEN BRAND

New Product Bulletin

NP 1002HE

The BAT family

Users need maximum mobility, flexibility and network availability in today's industrial environments.



The new expanded BAT family includes a broad portfolio of access points and clients that work seamlessly together.

BAT wireless technology from Hirschmann™

To ensure maximum flexibility and network availability in industrial environments, wireless data transmission systems are being deployed to an increasing extent as the perfect complement to cable-based networks. The new technology creates opportunities to develop new mobile applications and reduce cabling and maintenance costs.

DIN rail or field-level installation

The BAT family is the ideal solution wherever there is a need for high bandwidth, stable operation and tight network security. Hirschmann™ WLAN products deliver outstanding performance and maximum dependability even under extreme conditions in field-level applications. There are many scenarios where wireless systems are the

ideal solution, for example to create a low-cost data link between cable cars and a valley or mountain station, to manage a fleet of forklift trucks or to keep permanent records of operational data for wind farm generators. Whatever your particular needs might be, BAT technology from Hirschmann™, the pioneer in Industrial Ethernet, is your path to seamless networking.





Choose from the extensive portfolio of Hirschmann™ wireless products and get all the benefits of high operational reliability and investment security.

To find out more about Hirschmann™ high-reliability indoor and outdoor wireless solutions, please visit our website at www.hirschmann.com



The full range of Hirschmann™ WLAN access points and clients at a glance

The BAT family featuring cutting-edge data encryption, redundancy and a temperature range between -30° C and at least +50° C has what it takes for any application.

BAT family data and facts		
Product description	BAT-Rail	BAT-F
BAT54 These products support WLAN standards IEEE802.11a/b/g/h, and operate at up to 108 Mbps (raw data rate)		
	BAT54-Rail <ul style="list-style-type: none"> Industrial WLAN access point for installation on DIN rails Two IEEE 802.11a/b/g/h/i compliant WLAN interfaces 2 x LAN/PoE, 2 x 24 V, 1 x 12 V power supply BAT54-Rail Client <ul style="list-style-type: none"> Industrial WLAN access client for installation on DIN rails One IEEE 802.11a/b/g/h/i compliant WLAN interface 1 x LAN/PoE, 2 x 24 V, 1 x 12 V power supply 	BAT54-F <ul style="list-style-type: none"> Industrial WLAN access point with IP65/67 enclosure Two IEEE 802.11/ b/g/h/i compliant WLAN interfaces 1 x LAN/PoE, 2 x 24 V power supply BAT54-F Single <ul style="list-style-type: none"> Industrial WLAN access point with IP65/67 enclosure One IEEE 802.11a/b/g/h/i compliant WLAN interface, two PoE LAN interfaces 2 x LAN/PoE power supply BAT54-F Client <ul style="list-style-type: none"> Industrial WLAN access client with IP65/67 enclosure One IEEE802.11a/b/g/h/i compliant WLAN interface 1 x LAN/PoE, 2 x 24 V power supply
BAT300 These devices support WLAN standards IEEE802.11a/b/g/h/n and 802.11n (Draft 2.), and they operate at up to 300 Mbps (raw data rate)		
	BAT300-Rail <ul style="list-style-type: none"> Industrial WLAN access point for installation on DIN rails One IEEE 802.11a/b/g/h/n/i compliant WLAN interface 2 x LAN/PoE, 2 x 24 V, 1 x 12 V power supply 	BAT300-F <ul style="list-style-type: none"> Industrial WLAN access point with IP65/67 enclosure One IEEE 802.11a/b/g/h/n/i compliant WLAN interface 1 x LAN/PoE, 2 x 24 V power supply

All BAT family products offer the following outstanding features:

- Rugged housing for installation on DIN rails, walls or poles, IP40 or IP65/67 ingress protection
- Extended temperature range: -30° C to at least +50° C
- Up to 2 built-in wireless interfaces which support all WLAN standards
- Up to 5 redundant power supplies with 24 VDC Power over Ethernet (802.3af) and 12 V
- IEEE802.11i with PSK, LEPS, 802.1x and RADIUS for maximum WLAN security

The BAT family products are ideally suited for:

- Harsh conditions in indoor and outdoor industrial applications where the units are exposed to moisture, cold or extreme heat
- Applications where high operational reliability and redundancy are a must
- Installations where the devices must meet very stringent EMC and noise immunity requirements
- High-security networks that offer segmentation and authentication in addition to basic WLAN functionality



WLAN management keeps you in the picture

The screenshot shows the Hirschmann Industrial HiVision software interface. The top part displays a network topology map with various devices connected via WLAN and Ethernet. The bottom part shows an event log with the following data:

ID	Ack	Type	Category	Time	User	Source	Component	Message
7167		SNMP Trap		5/6/09 1:08:06 PM	SYSTEM	192.168.1.201	192.168.1.201	hmDevMonStateChange: hmDevMonSwitchState.1=1, hm...
7166		Status Worse		5/6/09 1:08:04 PM	SYSTEM	192.168.1.201	Power Supply 1/5...	Status Impairment: Warning (Status=Off)
7165		SNMP Trap		5/6/09 1:08:04 PM	SYSTEM	192.168.1.201	192.168.1.201 - P...	Power Supply Status Changed
7164		SNMP Trap		5/6/09 1:08:03 PM	SYSTEM	192.168.1.201	192.168.1.201	hmDevMonStateChange: hmDevMonSwitchState.1=1, hm...
7163		Status Worse		5/6/09 1:08:03 PM	SYSTEM	192.168.1.1	Power Supply 1/5...	Status Impairment: Warning (Status=Off)
7162		SNMP Trap		5/6/09 1:08:03 PM	SYSTEM	192.168.1.1	192.168.1.1 - Pow...	Power Supply Status Changed

An extensive software portfolio is available to help you get the most from your Hirschmann™ BAT products and manage your WLAN intelligently and efficiently in an industrial environment.

Hirschmann™ Industrial HiVision:

- Seamless LAN and WLAN network management

All BAT products are supplied with the following items and features at no extra cost:

- Windows Management Suite: LANconfig, LANmonitor, WLANmonitor
- Direct web browser based management (HTTP, HTTPS)
- Command line interface: Telnet or serial port
- Remote configuration via serial or DSL modem
- Scripting for partial configuration of multiple devices
- WLANmonitor for user-friendly WLAN monitoring, includes Rogue Access Point Detection

Industrial HiVision continuously shows the current connection status for all devices that are attached to the WLAN.

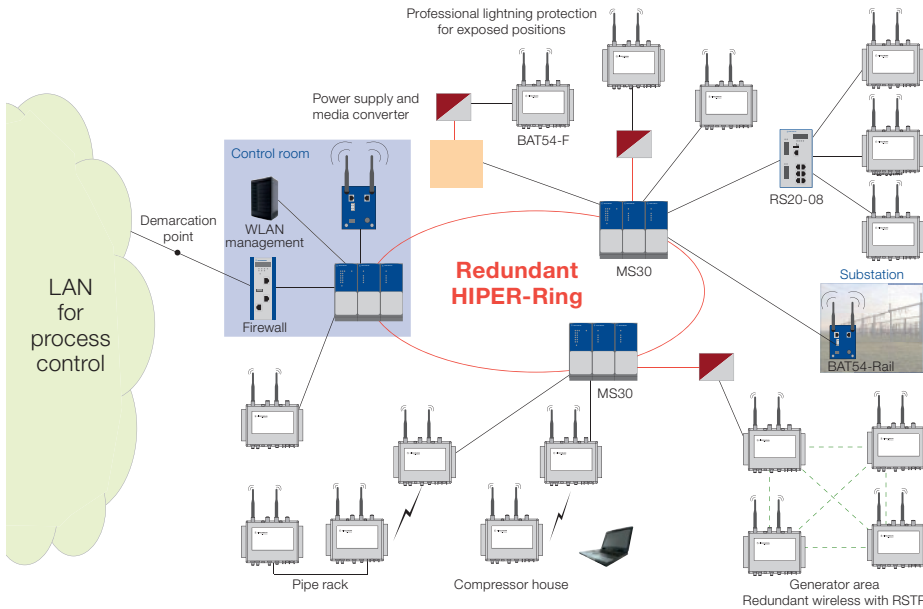
The screenshot shows the Hirschmann BAT web-based configuration interface. The left sidebar shows a tree view of the configuration options, including WLAN configuration. The main content area displays the 'Systeminformation' for the WLAN configuration, with a table showing the status of various components:

Substation/Port	Status	State/Mode	Information
CPULast	aktiv	1.0%	
Speicher	aktiv	12.8 MB/akt 0.2 MB/akt	
WLAN-1	aktiv	ja Betriebsart: Access Point	Assist-Systeme: 0 Transmitting: 0.1 dBm Mitteln-Lad: 1 Sendeleistung: 17.0 dBm Drehzahl: 1.4 kHz
WLAN-2	aktiv	ja Betriebsart: Access Point	Assist-Systeme: 0 Transmitting: 0.1 dBm Mitteln-Lad: 1 Sendeleistung: 17.0 dBm Drehzahl: 1.4 kHz
Paralleler-Verbindungen	keine Verbindungen konfiguriert		
LAN-1			Green-Panel: 0 Verbindungs-aufbau: ja Assist-Systeme: 150 MHz Port-Status Auto-Verbindungs: Aktiviert Flusssteuerung: nein Mitteln: nein
LAN-2			
LAN-1	Deaktiviert	12.8	
LAN-2	Deaktiviert	0.0	

All of these features support simple, straightforward commissioning, configuration, monitoring, device and network state diagnostics and network attack detection.

The integrated, user-friendly operating software guides the user step-by-step through the WLAN configuration process.

System overview: Hirschmann™ distributed wireless networks



Belden covers all the bases

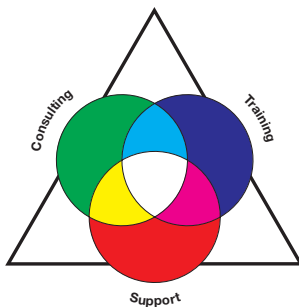
Belden is one of the world's leading suppliers of signal transmission solutions including cable, connectivity and active components for mission-critical applications ranging from industrial automation to data centers, broadcast studios, and aerospace. Belden offers an extensive and highly specialized product portfolio of signal transmission solutions for information, control and field levels, which the company produces and markets under its proprietary Belden®, Hirschmann™ and Lumberg Automation™ brands.



Belden has now expanded the Hirschmann™ product line with its BAT family of industrial networking products to meet current customer needs and enhance its leadership position in the high-availability WLAN solutions market. The Hirschmann™ product portfolio, which is backed up by a wealth of applications expertise, now includes WLAN solutions.

We would welcome the opportunity to tell you more about our extensive industry portfolio and Belden worldwide service. Further information and technical data are available online at www.beldenemea.com. You can also contact our sales team directly by dialing +49 (0) 7127/14-1809.

Belden Competence Center



Design your network as a cost-efficient total solution. Besides all of the connectivity products that you would expect, Hirschmann™ also offers an extensive range of manufacturer-independent services. Our consultants have the right tools and experience to design secure WLAN networks that meet your specific needs.

Besides training on our WLAN products, we offer manufacturer-independent technology training which addresses all aspects of WLAN deployment and operation. Our technical support team can conduct pre- and post-installation surveys to ensure that your WLAN delivers maximum availability and performance. Why not put together your own individual service package today?