



HIRSCHMANN

A BELDEN BRAND

New Product Bulletin

NP 1007HE

Hirschmann™ BAT Antenna Portfolio

Hirschmann™ complements the WLAN antenna portfolio: fast and stable wireless in harsh industrial environments



The new MiMo Technology Ensures the Stability of Radio Connections, Also in the Event of Interferences Such as Reflections

New Antenna Technology for High Signal Quality

With the BAT 300 access point and the two MiMo antennas Belden is the first manufacturer worldwide to offer a complete WLAN system for industrial applications that supports the recently adopted IEEE 802.11n data transmission standard. This allows for data rates comparable to a wired Fast Ethernet network. Furthermore, the hardware resists even the most extreme ambient conditions. And the software has a lot more to offer than just simple Layer 2 functionality.

Hirschmann™ has also updated the antennas for BAT54 devices.

Benefits of the Hirschmann™ Solution

- Supports BAT300 MiMo technology
- All antennas comply with IP65
- No difference between interior and exterior use
- Easy commissioning of access point / antennas / cables / protector
- BAT300-F range up to 40 km
- Antennas for industrial applications
- Higher reach, higher stability, suited for industrial purposes

Hirschmann™ BAT300 with 802.11n MiMo technology offers higher bandwidth and higher reach:

- Up to 100 Mbps net throughput
- Distances of up to 40 km at 15Mbps (BFWA)
- Standard PoE voltage supply
- Suited for offshore use due to certified salt-fog corrosion resistance with BAT300-F





As high-quality accessories, the BAT antennas effectively complement the innovative features of the BAT product line. The brand new MiMo antennas support the 802.11n "Fast-Ethernet over the air" transmission standard. With the BAT accessories and antennas, all of the components needed for a complete WLAN installation are now available. All antennas are equipped with the necessary adapters and cables.

Product Description

Type	BAT-ANT-N-6G-IP65	BAT-ANT-N-5A-IP65	BAT-ANT-N-MiMoDB-5N-IP6	BAT-ANT-N-6ABG-IP65	BAT-ANT-N-8G-DS-IP65	BAT-ANT-N-14G-IP23
Order number	943 981-002	943 981-003	943 981-012	943 981 004	943 981-009	943 981 005
Description	2,4GHz omnidirectional	5GHz omnidirectional	Dual band MiMo 11n omnidirectional	Dual band hemispherical	2,4GHz Dual Slant	2,4GHz directional

Suitability for Access Points

BAT-Rail	Very good	Very good	Very good	Very good	Very good	Very good
BAT-F	Very good	Very good	Very good	Very good	Very good	Very good
BAT54	Very good	Very good	Not recommended	Very good	Very good	Very good
BAT300	Possible	Possible	Very good	Possible	Good	Possible

Indoor Installation

Hall (no obstructions, free line of sight)	●	●	●	●	●	●
Production environment (automotive) (immobile machines, free line of sight)	●	●	●	●	●	
Store (mobile clients, reduced coverage)			●	●	●	
Plant (steel production) (no line of sight, mobile clients)			●	●	●	

Outdoor Installation

Long range, free line of sight (offshore, wind)						●
Medium range, free line of sight (transport)			●	●	●	●
Short range or reduced line of sight (oil/gas)	●	●	●	●	●	
Point-to-point						●

Antenna Position

Wall, mast, on the border of an area					●	●
Mast, on mobile device, in the middle of a hall	●	●	●			
On a cabinet			●	●	●	
On the ceiling			●	●		
Along a track, in a tunnel						

Scope of Supply

	1 x pigtail + 1 m cable	1 x pigtail + 1 m cable	3 x pigtail 3 x pre-mounted cable	Pigtail + 1 m cable	2 x pigtail + 1 m cable	1 x pigtail + 1 m cable
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BAT-ANT-N-9A-DS-IP65	BAT-ANT-N-MiMo5-9N-IP65	BAT-ANT-N-18A-V-IP65	BAT-ANT-N-23A-V-IP65	BAT-ANT-N-23A-VH-IP65	BAT-ANT-N-LC-G-50m-IP65	BAT-ANT-N-LC-G-100m-IP65
943 981-010	943 981-013	943 981 006	943 981 007	943 981 008	943 981-001	943 981-101
5GHz sector Dual Slant	5GHz MiMo 11n sector	5GHz medium directional	5GHz very directional	5GHz very directional 11n	2,4GHz leaky cable	2,4GHz leaky cable

Very good	Very good	Very good	Very good	Possible	Very good	Very good
Very good	Very good	Very good	Very good	Very good	Very good	Very good
Very good	Not recommended	Very good	Very good	Possible	Very good	Very good
Good	Very good	Not recommended	Not recommended	Very good	Not recommended	Not recommended

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1 x pigtail + 1 m cable	3 x pigtail 3 x pre-mounted cable	1 x pigtail + 1 m cable	1x pigtail + 1 m cable	2 x pigtail + 1 m cable	50 clips for wall mounting 1 x N plug Ferrule resistor	100 clips for wall mounting 2 x N plug Ferrule resistor
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Lightning Protection



BAT-ANT Protector

Order number: 943 903 374

- BAT Protector for antenna cables
- Developed and tested for applications in industrial environments
- Protects against any type of electrical discharge



BAT-LAN Protector-IP68

Order number: 943 903 374

- BAT Protector for PoE
- Waterproof lightning protection for PoE LAN cables

Cables / Adapters



BAT-CLB-2 N

Order number m-m: 943 903 513

Order number m-f : 943 903 514

- Length: 2m
- Attenuation: 1,4dB / 2,4 GHz - 3 dB / 5 GHz

BAT-CLB-5 N m-f

Order number: 943 903 516

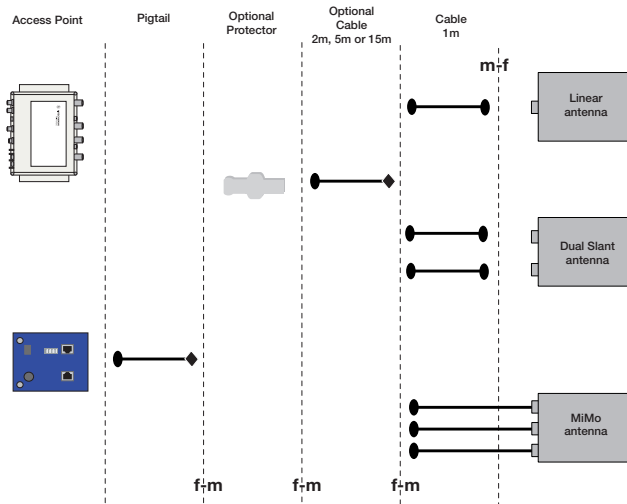
- Length: 5m
- Attenuation: 2,5dB / 2,4 GHz - 4 dB / 5 GHz

BAT-CLB-15 N m-f

Order number: 943 903 515

- Length: 15m
- Attenuation: 4dB / 2,4 GHz - 7dB / 5 GHz

All Fits Together



Access points, adapters, cables and surge protection can be freely combined.

Always the Right Solution

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.

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.beldensolutions.com. You can also contact our sales team directly by dialing +49 7127 14 1809.

For further Information please visit www.beldensolutions.com

Antenna Guide

The newly issued WLAN Antenna Guide provides a full overview of technical data, connectors and cables specifications.

Antenna Calculator

Use the antenna calculator to determine the distances and data rates available for your equipment.

Outdoor Installation Guide

Information for outdoor WLAN installation, including grounding, lightning protection, etc.