



Wireless Ethernet Access Point/Clients



OpenBAT Series

The new family of OpenBAT hardware is the latest generation of WLAN devices, representing a new evolutionary stage in WLAN technology, increasing WLAN network speed by up to 50% compared to the BAT300 devices. Designed, developed and patented by Hirschmann™, the OpenBAT platform allows you to select the device you need from a nearly unlimited range of interfaces, power supplies, housing types and specific certifications. The platform offers additional flexibility by allowing you to design a wireless network by either using the OpenBAT devices as standalone Access Point or managing the network centrally by the BAT-Controller.

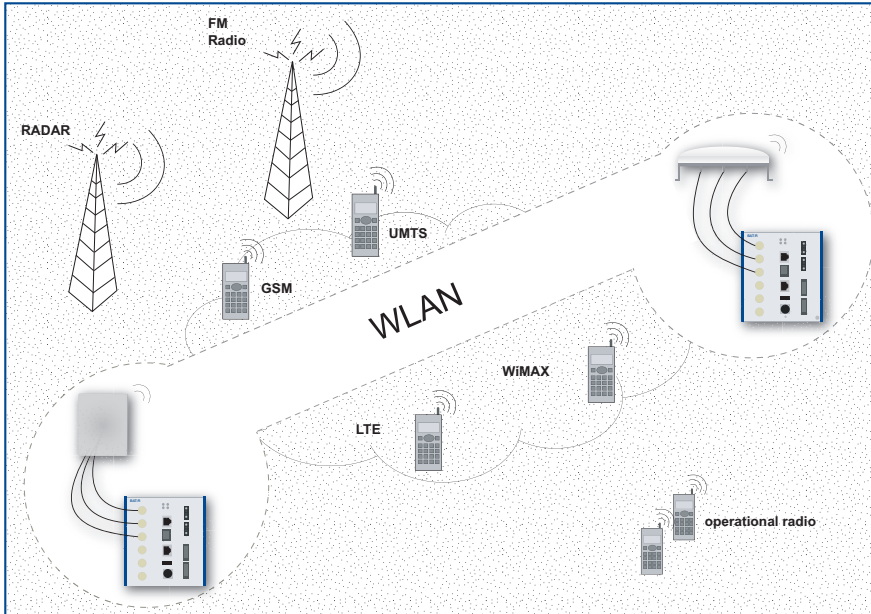
The new BAT generation delivers up to 30% cost savings and reduces the installation complexity and time as formerly external accessories, including ESD protection, power supply and fibre ports are now directly integrated into the OpenBAT hardware. Furthermore, the ESD discharge protection guarantees a longer lifetime of radios, delivering further cost savings.

Clear Space® Wireless

The application of bandpass filters helps to eliminate all interference caused by competing radio signals. The resulting Clear Space® wireless delivers greater transmission stability over longer distances without interruptions. The highest performance speed of 450 Mbit/s facilitates new applications such as HD video streaming.

Product Features

- Extended temperature range
- Enhanced shock and vibration stability
- New CPU platform with Gigabit Ethernet support
- Selectable type of power supply fits the device to the application
- Supporting all types of certifications needed for vertical applications
- Newest technology designed for harsh and demanding industrial environment
- Long lasting devices, high MTBF guarantee low failure rate
- Best radio technology enabling new applications and reliable connections
- Redundant design enables high availability and network stability
- Flexibility to either run with or without the BAT-Controller
- Powerful operating system that guarantees solutions in every application
- Supporting highest security standards for guaranteed safe and reliable networking



Clear Space® technology delivers reliable radio connections, even in locations such as ports, where many competing radio technologies are used. The new patented Hirschmann™ radios will not be affected, so that for instance a video transmission over WLAN supervising the building of a ship will remain stable and high quality. Overall, video installation costs are lower and less complex. This also applies to installations in trains. Hirschmann™ BAT devices can withstand electrical discharges.

Technical Information

Product Description	
Type	OpenBAT
Description	Rugged wireless LAN access point and/or client for use in industrial environments. Robust metal housing for mounting on DIN rails.
Available Ports	One or two WLAN interfaces, IEEE 802.11a/b/g/n, one or two Gigabit LAN ports, Power over Ethernet, GigabitCombo Port with optional SFP
Construction	
Mounting	DIN Rail (BAT-R), Wall and Mast (BAT-F)
Protection Class	IP30, IP67
Dimensions (WxHxD)	120/150 x 136 x 120 mm (BAT-R), ~ 311 x 322 x 75 mm (BAT-F)
Ambient Conditions	
Operating Temperature	0°C to +60°C, -40°C to +70°C (with and without conformal coating) selectable
Storage/Transport Temperature	-40°C to +85°C
Relative Humidity (non-condensing)	mind. 10% to 95%
Radio Technology	
Antenna Connector	3 x MiMo antenna connectors, Reverse SMA socket (BAT-R), N-socket (BAT-F)
Frequency Band	Supports 2.4 GHz and 5 GHz: 2400 to 2483.5 MHz (ISM) and 5170 to 5850 MHz
Power Requirements	
Operating Voltage	Different types of power supplies selectable, 24 V DC, 48 V DC, 90 to 230 V AC, 48 to 320 V DC
Current Consumption at 24 V DC	9 W
Regulatory Approvals	
Safety of Industrial Control Equipment	EN 60950-1, EN 6950-22
Radio	EN 300 328 (2.4 GHz), EN 301 893 (5 GHz), EN 301 489-1, EN 301 489-17
Environmental	EN 50155, EN 61850, Atex Zone II, Class 1 Div 2
For Use in Vehicles and Cars	E1
Reliability	
Warranty	5 years standard

NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com



Wireless Ethernet Antennas

BAT Series

BAT Series, Dual-Frequency Antennas/802.11a/b/g/n (2.4 GHz and 5 GHz)			
Part No.	Order No.	Type	Standards
BAT-ANT-N-6ABG-IP65	943 981-004	Dual Band Omni-Directional	802.11a/b/g
BAT-ANT-N-MiMoDB-5N-IP65	943 981-012	Dual Band Omni-Directional, 2.4 GHz 3.5 dBi, 5 GHz 5.5 dBi, MiMo	802.11a/b/g/n



BAT-ANT-N-6ABG-IP65

BAT Series, Antennas/802.11a/n (5 GHz)			
Part No.	Order No.	Type	Standards
BAT-ANT-N-5A-IP65	943 981-003	5 GHz Omni-Directional, 5 dBi gain	802.11a
BAT-ANT-N-9A-DS-IP65	943 981-010	5 GHz, Directional antenna, 8 dBi gain w/polarization diversity	802.11a/n
BAT-ANT-N-MiMo5-9N-IP65	943 981-013	5 GHz, Directional antenna, 9 dBi gain, MiMo	802.11a/n
BAT-ANT-N-18A-IP65	943 981-006	5 GHz, Directional antenna, 18 dBi gain	802.11a
BAT-ANT-N-23A-V-IP65	943 981-007	5 GHz, Directional antenna, 23 dBi gain	802.11a
BAT-ANT-N-23A-VH-IP65	943 981-008	5 GHz, Directional antenna, 23 dBi gain w/polarization diversity	802.11a/n



BAT-ANT-N-MiMoDB-5N-IP65

BAT Series, Antennas/802.11b/g/n (2.4 GHz)			
Part No.	Order No.	Type	Standards
BAT-ANT-N-6G-IP65	943 981-002	2.4 GHz Omni-Directional, 6 dBi gain	802.11b/g
BAT-ANT-N-8G-DS-IP65	943 981-009	2.4 GHz Directional, 8 dBi gain w/polarization diversity	802.11b/g/n
BAT-ANT-N-14G-IP23	943 981-005	2.4 GHz Directional, 14 dBi gain	802.11b/g
BAT-ANT-N-LC-G-50m-IP65	943 981-001	2.4 GHz Leaky Coax, 50 meter (1 x N connector)	802.11b/g
BAT-ANT-N-LC-G-100m-IP65	943 981-101	2.4 GHz Leaky Coax, 100 meter (2 x N connectors)	802.11b/g



BAT-ANT-N-MiMo5-9N-IP65

BAT Series, Accessories			
Part No.	Order No.	Type	Standards
BAT54-F MAST MOUNT	943 966-001	Mast Mounting Kit for BAT (IP67) products	-
BAT-CLB-2 N m-m	943 903-513	Antenna cable 2 m, N male to N male	802.11a/b/g/n
BAT-CLB-2 N m-f	943 903-514	Antenna cable 2 m, N male to N female	802.11a/b/g/n
BAT-CLB-5 N m-f	943 903-516	Antenna cable 5 m, N male to N female	802.11a/b/g/n
BAT-CLB-15 N m-f	943 903-515	Antenna cable 15 m, N male to N female	802.11a/b/g/n
BAT-PIGTAIL	943 903-360	Used to adapt BAT Rail products to N-style connector	802.11a/b/g/n
BAT-ANT Protector m-f	943 903-373	RF Surge Arrestor, N male to N female	802.11a/b/g/n
BAT-LAN Protector IP68	943 903-374	IP68 RF Surge arrester, N male to N female	802.11a/b/g/n



BAT-ANT Protector