


## Data sheet

### BAT54-F Single - BAT54-F Single

Industrial Ethernet:Industrial Wireless LAN:Chassis:BAT-F:BAT54-F Single	
Name	BAT54-F Single
	
Delivery informations	
Document created at	05-08-2010
Availability	available
Product description	
Description	Dualband Ruggedized Industrial Wireless LAN Access Point/Client with one radio module with IEEE 802.11a/b/g/h/i and two PoE/LAN ports for installation in harsh environment Available Q2/2009
Port type and quantity	1 x WLAN interfaces, up to 8 SSIDs per WLAN interface, 2 x LAN port 10/100BASE-TX, autosensing, Power over Ethernet according to IEEE 802.3af
Type	BAT54-F Single
Order No.	943 959-116
Radio technology	
Antenna connector	2 x N-type jack antenna connectors
Range	Up to 20 km with external antenna (depending on type of antenna, frequency range and data rate)
Transmission rate	54 Mbps according to IEEE 802.11g (fallback to 48, 36, 24, 18, 12, 9, 6 Mbps, Automatic Rate Selection), compatible to IEEE 802.11b (11, 5.5, 2, 1 Mbps, Automatic Rate Selection), 802.11 b/g compatibility mode or pure g or pure b selectable. 54 Mbps according to IEEE 802.11a/h (fallback to 48, 36, 24, 18, 12, 9, 6 Mbps, Automatic Rate Selection), Super A/G with Turbo Mode (108 MBps), Bursting, Compression, fully compliant to ETSI requirements with TPC and DFS
Encryption	IEEE 802.11i / WPA2 with passphrase or 802.1x and hardware-accelerated AES, user authentication by 802.1x /EAP or LEPS, IEEE 802.1x Supplicant in Client Mode, WPA/TKIP, WEP, access-control lists, WLAN port and protocol filter, RADIUS client and server, Built-in Firewall with QoS, port filter, protocol filter, IDS and DoS protection, PMK-Caching and Preauthentication for fast roaming with IEEE 802.1x
Operating system	LAN interfaces usable for simultaneous DSL-over-LAN, IP-Router, NAT/Reverse NAT (IP-Masquerading) DHCP-Server, DHCP-Client, DHCP-Relay-Server, DNS-Server, PPPoE-Client (incl.Multi-PPPoE), PPTP-Client und -Server, NetBIOSProxy,DynDNS-Client, NTP, Port-Mapping, Policy-based Routing on basis of Routing-Tags, Tagging according to firewall rules, dynamic routing RIPv2, VRRP, Rapid Spanning Tree Protocol (IEEE 802.1w), ARP, Proxy ARP, BOOTP, DHCP, DNS, HTTP, HTTPS, IP, ICMP, NTP/SNTP, NetBIOS, PPPoE (Server), RADIUS, RIP-1, RIP-2, RTP, SIP, SNMP, TCP, TFTP, UDP, VRRP, VLAN with up to 4094 VLAN IDs for WLAN connections, 32 usable simultaneously, dynamic VLAN-Tags for 802.1x-Clients, Integrated RADIUS server with IEEE 802.1x/EAP authentication
Frequency band	1 x radio modules,2.4 GHz and 5 GHz: 2400-2483,5 MHz (ISM) and 5170-5810 MHz
Modulation	22M0F7D(DSSS/OFDM) @ 2,4 GHz 20M0G7D (OFDM) @ 5 GHz
Receiver sensitivity	2.4 GHz 802.11b: -87 dBm @ 11 Mbit/s, -94 dBm @ 1 Mbit/s; 2.4 GHz 802.11g: -87 dBm @ 6 Mbit/s, -70 dBm @ 54 Mbit/s; 5 GHz 802.11a/h: -87 dBm @ 6 Mbit/s, -67 dBm @ 54 Mbit/s
Radio topology	WLAN Access Point, Bridge, Router, Point-to-Point, Client, Client-Bridge Mode, fixed mesh with RSTP
Roaming	Seamless handover between radio cells, IAPP support, IEEE 802.11d support, Background scanning for rogue AP detection and fast roaming, Support of IEEE 802.11e (WME), preauthentication and PMK caching with IEEE 802.1x
Radio Power	2.4 GHz 802.11b: +19dBm @1 and 2 Mbps, +19dBm @ 5.5 and 11 Mbps, 2,4 GHz 802.11g: +19 dBm @ 6 Mbps, +14 dBm @ 54 Mbps, 5 GHz 802.11a/h: +18 dBm @ 6 Mbps, +12 dBm @ 54 Mbps with TPC and DFS, Power Reduction in 1dB steps down to 0.5 dBm minimum
Power requirements	
Operating voltage	2 x Power-over-Ethernet according to IEEE802.3af; redundant to each other
Current consumption at 24 V DC	-
Current consumption	PoE (DC 48 V): 167 mA
Service	
Diagnostics	Extensive LOG and TRACE options, PING and TRACEROUTE for checking connections, LANmonitor status display, internal logging buffer for SYSLOG and firewall events, monitor mode for Ethernet ports, WLANmonitor for WLAN network overview and Rogue AP detection
Management	SNMP management via SNMP V2, private MIB exportable by WEBconfig, MIB II Remote configuration with Telnet/SSL, SSH, browser (HTTP/HTTPS), TFTP or SNMP, firmware upload via HTTP/HTTPS or TFTP Support of up to 4094 VLAN IDs for WLAN connections, 256 simultaneously usable VLAN tags for 802.11 clients
Other services	Warning via e-mail, SNMP-Traps and SYSLOG; Remote management and configuration by modem support via LAN (DSL) or serial port

Industrial Ethernet:Industrial Wireless LAN:Chassis:BAT-F:BAT54-F Single	
<b>Ambient conditions</b>	
Operation temperature	-30 °C to +60 °C
Storage/transport temperature	-40 °C to +70 °C
Relative humidity (non-condensing)	max. 95%
MTBF	43.3 years
<b>Mechanical construction</b>	
Dimensions (W x H x D)	261 mm x 189 mm x 55 mm
Mounting	for wall and mast mounting
Protection class	IP 65, IP 67
<b>Approvals</b>	
Safety of information technology equipment	EN 60950
Radio	EN 300328, EN 301893, notified in all countries of EU. For other notifications or certifications please refer to INET-Sales@hirschmann.de
Environmental	EN 61000-6-2 , EN 61131 EN50155 (in preparation) E1 (in preparation)
<b>Scope of delivery and accessories</b>	
Scope of delivery	Device, CD, M12 connector, 1 x 50 Ohm terminator, mounting material, 2x dipole antennas
Accessories to order separately	External antennas for 802.11b/g and 802.11a/h operation adapter cable and surge arrestor, mast mount material