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Product: BAT867-F Europe for Transportation

802.11ac IP65/IP67 WLAN Gateway, 2x2 MIMO, Dual Band, Europe, Accessories included

Product Description

802.11ac IP65/IP67 WLAN Gateway, 2x2 MIMO, Dual Band,, Europe,, Accessories included,, Connectors included

Technical Specifications

Product description

Name:	BAT867-F Europe for Transportation
Part Number:	942276200
Port type and quantity:	1x Ethernet M12 X-Coded,, 1x Power M12 A-Coded
Radio protocol:	IEEE 802.11a/b/g/n/ac WLAN interface as per IEEE 802.11ac , 802.11F (IAPP) as Access Point, 802.11r as Access Point
Country certification:	Europe (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lituania, Luxembourg, Malta, Netherland, Poland, Portugal, Romania, Sweden, Slowakia, Slowenia, Spain), Iceland, Liechtenstein, Norway, Switzerland, Turkey

More Interfaces

Local Management and Device Replacement:	Webinterface, HiDiscovery v1, Config files and scripts, Different config levels (factory, customer-specific, rollout, running)
Ethernet:	1x 10/100/1000Mbit/s
Power Supply:	PoE PD via Ethernet M12 X-Coded,, 24VDC via M12 A-coded 5-pin,, field assembly connectors included,, field assembly connectors included

Radio technology

Antenna connector:	2x N-Type Female Socket, requires N-Type Male Connectors on the Antenna
Frequency band:	Supports 2.4 GHz or 5 GHz: 2412-2472 MHz or 5180-5825 MHz (regulatory restrictions apply depending on the country of operation)
Modulation:	OFDM: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM; Note: MCS numbering changed with 11ac. Supported rates with up to 2 streams: MCS0-MCS9. Channel widths: 20MHz, 40MHz and 80MHz
Receiver sensitivity:	-95 dBm
Additional radio features:	2x2 MIMO (configurable). Up to 2 streams (configurable). Spatial Multiplexing, Cyclic-Delay Diversity (CDD), Low-Density Parity Check (LDPC) Codes, Maximal Ratio Combining (MRC), Space Time Block Code (STBC)

Power requirements

Operating Voltage:	PoE PD 802.3af Class 3,, 24 VDC (18-32 VDC)
Power consumption:	Maximum power consumption : 9 W

Diagnostics features

Monitoring:	Syslog (UDP), SNMPv1/2c/3, (W)LANMonitor, Console, Email (SMTP)

Security features

Authentication:	User Management (local, RADIUS, TACACS+, fallback mode)
Encryption:	Open, WEP, 802.11i - WPA/WPA2 - Personal (PSK), 802.11i - WPA/WPA2 - Enterprise (802.1X: TLS, TTLS/PAP, TTLS/CHAP, TTLS/MSCHAP, TTLS/MSCHAPV2, TTLS/MD5, PEAP/MSCHAPV2)
Stateful inspection firewall:	Static Firewall Layer2, Layer3, IPv4/IPv6 with Incoming and Forwarding Ruleset, Stealth mode

Service

Other services:	DHCP Server (IPv4/IPv6, dynamic and static leases, IPv6 Prefix Delegation, DNS proxy) , DynDNS client , PPPoE , FTP server , E-Mail via SMTP

Software

Software features:	High performance operating system HiLCOS. Supports WLAN functions, routing, firewall, VLAN and redundancy. IPv4 and IPv6.
Operating system:	HiLCOS, stores two separate firmware versions for fallback
Switching:	IGMP Snooping, VLAN, Switching over WLAN (Client Briding or P2P)
Redundancy:	RSTP, VRRP v2
Management:	Web Interface (HTTPs), IPv4, IPv6, SNMP v1/v2/v3, Console (SSH, Telnet)
Diagnostics:	System log, reboot log, signal strength, Trace (via Lantools or Console), LEDs, IPerf Server and Client
Configuration:	Text file configuration and script, HTTP(s), Console (SSH, Telnet), SNMPv1/2c/3, LANConfig
Time synchronisation:	SNTP Client, SNTP Server
Routing:	Static unicast routing, RIP, Multinetting, IP Masquerading, Port Forwarding, Proxy ARP, 1-to-1 NAT, 1-to-N NAT, N-to-N NAT
Dynamic routing:	VRRP v2, BGP, OSPF
Management Software:	Industrial HiVision , LANConfig,, optional BAT Controller (WLC for AccessPoint mode)

Ambient conditions

MTBF (Telecordia SR-332 Issue 3) @ 25°C:	233 Years
Operating temperature:	-40-+70 °C
Note:	Temperature of the surrounding air.
Storage/transport temperature:	-40-+70 °C
Relative humidity (non-condensing):	10-95 %
Protective paint on PCB:	Yes (conformal coating)

Mechanical construction

Dimensions (WxHxD):	172 mm x 150 mm x 50 mm
Housing:	Metal
Mounting:	Wall mounting
Protection class:	IP65/67 (when using matching connectors)

Approvals

Basis Standard:	CE, RED
Safety of information technology equipment:	IEC/EN 62368-1:2014 + AC:2015 (formerly EN 60950-1), EN 62311:2008
Transportation:	EN 50121-4:2016
Radio:	ETSI EN 300 328:2019 V2.2.2 (2.4GHz), ETSI EN 301 893:2017 V2.1.1 (5GHz), ETSI EN 302 502:2017 V2.1.1 (5.8GHz)

WLAN Access Point

Access Point Functionality:	Yes (Free selection between Access Point, Access Client and Point-to-Point functionality separately in software). Operates as Managed Access Point in combination with a BAT Controller (WLC). PMK Caching, Preauthentication, OKC (Opportunistic Key Caching).
Number of SSIDs:	8 (In parallel for Access Point and P2P mode, exclusively in Client mode)
Max. Number of Connected Clients:	127

WLAN Client

Client / STA Functionality:	Yes (Can be switched in software between AP, P2P, Client)

WLAN Typical Receive Sensitivity

802.11n, 2.4 GHz, 20 MHz, MCS0:	-93 dBm
802.11n, 2.4 GHz, 20 MHz, MCS7:	-76 dBm
802.11n, 5 GHz, 20 MHz, MCS0:	-93 dBm
802.11n, 5 GHz, 20 MHz, MCS7:	-73 dBm

Scope of delivery and accessories

Accessories to Order Separately:	External antennas; Cables 2m, 5m, 15m;,; 2x Antenna (BAT-ANT-N-3AGN-IP67); 1x 50 Ω terminating resistor
Scope of delivery:	Device, safety instructions, dust protection caps,, EU declaration of conformity,, outdoor safety instructions,, 2x Antenna (BAT-ANT-N-3AGN-IP67), 1x 50 Ω terminating resistor, Field attachable Gigabit Ethernet connector “X”-coded (942 083-001), M12 power supply plug (ELKA 5012 PG7),, Field attachable Gigabit Ethernet connector “X”-coded (942 083-001), M12 power supply plug (ELKA 5012 PG7)

Further Instructions

Product Documentation:	https://www.doc.hirschmann.com
Certificates:	https://www.doc.hirschmann.com/certificates.html

Variants

Item #
942276200

Update and Revision:	Revision Number: 0.51 Revision Date: 08-17-2022

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