Product: [BAT-C2 Europe](#) ↗

Compact WLAN Client and AccessPoint with 11ac technology and fast roaming.

Product Description

The BAT-C2's compact design and low weight are unprecedented in its class of ruggedized industrial WLAN devices. It is optimized for integration either into mobile units or stationary machines. When used as a mobile client it delivers fast roaming at an enterprise security level. When used stationary it allows for simple integration and automatic control of its AccessPoint functionality to deliver wireless access locally around a machine.

Technical Drawing

Technical Specifications

Product description

Type:	BAT-C2-W01.01-F01-U01-A01
Name:	BAT-C2 Europe
Part Number:	942 249-001
Port type and quantity:	1 Port: 10/100 BASE TX

Radio protocol:	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.11ac

More Interfaces

WLAN Antenna:	2x RP-SMA Female Socket
Ethernet:	M12 D-Coded Socket Female
Power Supply:	M12 A-Coded Socket Male

Power requirements

Power Loss Buffer:	min. 10 msec
Operating Voltage:	12 VDC .. 24 VDC (nominal), 9.6 VDC .. 32 VDC (max tolerances)

Software

Software features:	Filesystem to store custom data, QoS, QoS based on IP or Ports, GRE, MAC filter
Management:	Web Interface (HTTPS),IPv4, IPv6, Filesystem to store custom data, SNMP v1/v2/v3
Diagnostics:	DNS, Routing, System Log, Ping, Traceroute, Syslog
Configuration:	DHCP client, DHCP Server, Extendable via custom Python Scripts
Security:	IPSec, Firewall, User Permission Management
Routing:	Static, RIP, OSPF, 1:1 NAT, Port Forwarding

Ambient conditions

MTBF (Telecordia SR-332 Issue 3) @ 25°C:	137.8 Years
Operating temperature:	-40-+70 °C
Relative humidity (non-condensing):	1-95 %

Mechanical construction

Dimensions (W x H x D):	102 mm x 72 mm x 34.5 mm
Weight:	140 g (device without connectors)
Housing:	Plastic

Mechanical stability

IEC 60068-2-6 vibration:	5 Hz ... 8,4 Hz with 3.5 mm Amplitude; 8.4 Hz ... 150 Hz with 1 g
IEC 60068-2-27 shock:	11 g at 11 ms

EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD):	4 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field:	20 V/m (80 MHz - 1000 MHz), 10 V/m (1GHz - 3 GHz), 10 V/m (3 GHz - 6 GHz)
EN 61000-4-4 fast transients (burst):	2 kV power line, 1 kV data line (shielded)
EN 61000-4-5 surge voltage:	power line 1 kV (line/earth), 0,5 kV (Line/line); data line 1 kV (shielded)
EN 61000-4-6 Conducted Immunity:	10 V (150 kHz - 80 MHz); 1 kHz, 80 % AM

EMC emitted immunity

EN 55032:	Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15 Subpart B Class A digital device

Approvals

Basis Standard:	CE Conformity

WLAN Access Point

Access Point Functionality:	yes
Security:	WPA/WPA2 Personal PSK

WLAN Client

802.11w - PMF:	yes
Client / STA Functionality:	yes
Network Modes:	1:1 MAC Adoption, Bridging, NAT + Masquerading
Roaming Thresholds:	yes
Security:	IEEE 802.1X - FAST, IEEE 802.1X - LEAP, IEEE 802.1X - PEAP, IEEE 802.1X - TLS, IEEE 802.1X - TTLS, Open, WEP, WPA/WPA2 Enterprise Radius 802.1X, WPA/WPA2 Personal PSK

WLAN Output Power

WLAN technology	Power load
Minimal Output Power	5 dBm
Granularity steps	1 dB
802.11b, 1 Mbps	16±2 dBm
802.11b, 11 Mbps	16±2 dBm
802.11g, 6 Mbps	14±2 dBm
802.11g, 54 Mbps	14±2 dBm
802.11a, 6 Mbps	14±2 dBm
802.11a, 54 Mbps	14±2 dBm
802.11n, MCS0, 2.4 GHz	13±2 dBm
802.11n, MCS7, 2.4 GHz	13±2 dBm
802.11n, MCS0, 5 GHz	13±2 dBm
802.11n, MCS7, 5 GHz	13±2 dBm
802.11ac, MCS8, 5 GHz	13±2 dBm
802.11ac, MCS9, 5 GHz	11±2 dBm

WLAN Typical Receive Sensitivity

802.11n, 2.4 GHz, 20 MHz, MCS0:	-93 dBm
802.11n, 2.4 GHz, 20 MHz, MCS7:	-74 dBm
802.11n, 5 GHz, 20 MHz, MCS0:	-92 dBm
802.11n, 5 GHz, 20 MHz, MCS7:	-74 dBm
802.11ac, 5 GHz, 20 MHz:	-70 dBm

WLAN Approvals

WLAN Approvals	Applicable
ETSI RED CE	Yes
ETSI - EN 300 328	Yes
ETSI - EN 301 893-1	Yes
ETSI - EN 301 489-1	Yes
ETSI - EN 301 489-17	Yes
ETSI - EN 302 502 (5.8 GHz)	-
ETSI - EN 300 440 (SRD)	-
FCC	-
SRRC	-

WLAN Countries

WLAN AccessPoints/Clients	Applicable	WLAN AccessPoints/Clients	Applicable
Australia	-	Japan	-
Austria	Yes	Latvia	Yes
Belgium	Yes	Lithuania	Yes
Brazil	-	Luxembourg	Yes
Bulgaria	Yes	Malaysia	-
Canada	-	Malta	Yes
China	-	Mexico	-
Croatia	Yes	Netherland	Yes
Cyprus	Yes	New Zealand	-
Czech Republic	Yes	Philippines	-
Denmark	Yes	Poland	Yes
Estonia	Yes	Portugal	Yes
Finland	Yes	Romania	Yes
France	Yes	Singapore	-
Germany	Yes	Slowakia	Yes
Great Britain	-	Slowenia	Yes
Greece	Yes	South Korea	-
Hungary	Yes	Spain	Yes
India	-	Sweden	Yes
Indonesia	-	Thailand	-
Ireland	Yes	USA	-
Italy	Yes	Vietnam	-

WLAN Channels

WLAN Approvals	Applicable
2.4GHz	1-11, 12, 13
Supported Bandwidth, 5GHz	20/40/80 Mhz
5GHz (U-NII-1), 36-48	Yes
5GHz (U-NII-2a), 52-64	Yes
5GHz (U-NII-2c), 100-116	Yes
5GHz (U-NII-2c), 120-128	Yes
5GHz (U-NII-2c), 132, 140	Yes
5GHz (U-NII-2c), 144	-
5GHz (U-NII-3), 149-165	-

Scope of delivery and accessories

Accessories to Order Separately:	Ethernet Cable M12-RJ45, Ethernet Cable M12-M12, 942 046-001 BAT-ANT-RSMA-2AGN-R
Scope of delivery:	1x Device, 1x General Safety Instructions, 1x Power Connector
Technical Information:	https://hirschmann-support.belden.com/en/kb/bat-c2

Variants

Item #	Type
942249001	BAT-C2-W01.01-F01-U01-A01