

Product: [BAT-C2 North-America](#) 



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-W02.01-F01-U01-A01
Name:	BAT-C2 North-America
Part Number:	942 249-002
Availability:	On request

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

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

WLAN Countries

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

WLAN Channels

WLAN Approvals	Applicable
----------------	------------

2.4GHz	1-11
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	-
5GHz (U-NII-2c), 132, 140	Yes
5GHz (U-NII-2c), 144	Yes
5GHz (U-NII-3), 149-165	Yes

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
942249002	BAT-C2-W02.01-F01-U01-A01

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.