

# Remote Access Bridge (RAB)

## Secure Remote Access for Smaller Size Avi-on Bluetooth® Lighting Installations



**Anywhere Operation**  
Monitor or manage the connected Avi-on Control system from anywhere via the mobile app or cloud web page.

**Remote Firmware Updates**  
Updates are provided automatically by Avi-on without user input required

**Time Synchronization**  
The RAB automatically synchronizes network time to ensure consistent scheduling through power outages.

**Easy Setup**  
The Wifi RAB connects to any basic local wifi network by selecting the wifi network and entering the password.

## PRODUCT OVERVIEW

The Avi-on Remote Access Bridge (RAB) provides remote 24/7 access to Avi-on Bluetooth Lighting Control Systems

### Remote System Monitoring

The RAB bridges between the Avi-on Cloud and Avi-on Bluetooth Lighting Control local Bluetooth Network, allowing remote commissioning, updates, troubleshooting, and control from the Avi-on mobile app or Avi-on Pro. Also supports energy monitoring with appropriate Avi-on end points

### Suited for Small Locations

The Avi-on Wifi RAB provides low cost remote connectivity for locations with 50 devices or less that have simple wifi network environments. For larger installations, where a more complex corporate managed IT environment exists, use the AVI-RAB-LTE.

### Highly Secure

- All traffic is HTTPs encrypted. Passwords use SHA256 or better.
- Remote Access Bridge passwords are unique and not available to users or factory.
- No VPN required, works with standard corporate firewall (assuming required ports are open)
- No way to connect to Bridge from outside with methods that can load malicious firmware (e.g. SSH, Telnet). Restricted access even inside local network, even if you have a password.
- Ports used: 80 (HTTP, Ping only), 443 (HTTPS), 5671&5672 (MQTT)

### Not A Gateway

The Avi-on bridge is not a gateway. It acts as a link between the Avi-on cloud and the local bluetooth network. Only a single RAB is used per location. There is no need to apply multiple per location (Use a single AVI-RAB-LTE for larger locations)

Project		Location/ Type	
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## ORDERING INFORMATION

Select a part number from the table listed below.

Part Number	Description	Plug Type	Supply Voltage
<b>2001RAB-01-C</b>	Remote Access Bridge (50 or less BLE Node Capacity)	Type A Plug	120/240 VAC, 50/60 Hz

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or [prosales@avi-on.com](mailto:prosales@avi-on.com) for information on becoming an Avi-on partner and order details.

## SPECIFICATIONS

### Electrical

Input Voltage Specifications	Min	Max	Unit
Supply Voltage	110	240	V
Mains Frequency	-	50/60	Hz
Operating Current	17	200	mA

System Communications	Min	Max	Unit
Bluetooth Signal Frequency	2402	2480	MHz
Bluetooth Wireless Range	-	70*	Feet
Wi-Fi Signal Frequency (2.4GHz only)	2412	2472	MHz
Wi-Fi Wireless Range	10*	50*	Feet

\* Actual results may vary, depending on local environment

Environmental Specifications	Min	Max	Unit
Ambient Operating Temperature	0	40	°C
Storage Temperature	-30	45	°C

### Case Dimensions (Excluding Type A Plug)

Part	Length	Width	Height
All	2.17" (55 mm)	1.57" (40 mm)	1.38" (35 mm)

### Supported Wifi Security Protocols

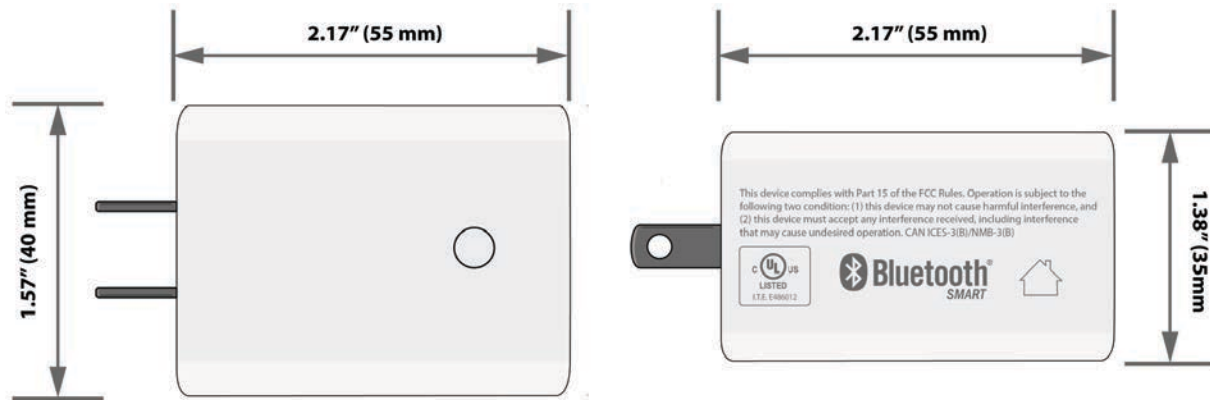
Security Protocol
WPA Personal
WPA Personal with Fixed IP Address

### Certifications

Regulatory	Description
USA	FCC: 2AFZI-2001RAB
UL	I.T.E. E486012
Canada	IC: 20544-2001RAB
BQB	DID: D031800 Qualified Design ID: 85750

# PRODUCT DIAGRAMS

The Avi-on Remote Access Bridge is designed in a small form factor (2.17" (55 mm) x 1.57" (40 mm) x 1.38" (35 mm)) and functions in any standard type A outlet running 110/240 VAC, 50/60Hz.



**Figure 1. Avi-on Remote Access Bridge (RAB)**

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