LTE/Ethernet Bridge

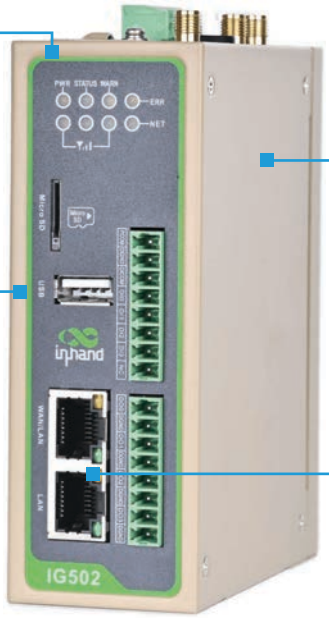
Secure Remote Access and Backup for Avi-on Bluetooth® Lighting Systems

Always On LTE Connection

The LTE connection is enabled and running by default with no on-site configuration required.

Remote Management

Device is fully remotely monitored. All all settings and firmware can be remotely managed



Easy Setup

The Bridge connects to the Bluetooth network just like any other Avi-on device. Remote connectivity is as simple as plugging int the RAB and adding to the account

Ethernet Network Connection

Connect to the internet via an Ethernet RJ-45 Connection. Configure static or dynamic ethernet IP address remotely through LTE

PRODUCT OVERVIEW

The Avi-on LTE/Ethernet Remote Access Bridge provides secure 24/7 access to Avi-on Bluetooth Lighting Control Systems enabling remote commissioning, visibility to current device status, and capture of energy monitoring data (requires Avi-on energy monitoring hardware). Allows connection via Ethernet (RJ-45)

Secure Remote Access Regardless of Local Network Access
Remotely monitor, commission, and support any Avi-on network with a single device per network, even if a local internet is not yet installed or is not accessible. LTE connectivity is enabled by default to provide continuous remote access regardless of the local internet status. Remotely configure Ethernet IP addresses and configurations as well.

Supports the Full Avi-on Command Set
All network configuration and management features are accessible remotely including device adding/removing from the account, remote device commissioning, diagnostics, remote control, and energy/sensor trigger data collection.

Flexible Remote Management
LTE/Ethernet RAB has full remote status management including cell strength, ethernet status, and RAB status. LTE provides automatic back up to the Ethernet port to assure high reliability and automatic failover.

Long Term Remote Support Included
Cellular service is included at no charge during commissioning phase. Long term backup cellular connectivity also included at no cost. Primary cellular long term service available at a nominal cost available in 1 and 5 year subscriptions

Project		Location/ Type	

ORDERING INFORMATION

Part Number	Product Name	Connection Type	Supply Voltage
AVI-RAB-LTE	LTE Remote Access Bridge	LTE/Ethernet RJ-45	12VDC (AC 110-277 Supply Included)

To order please contact Avi-on sales at **(877) AVION-US,** (877) 284-6687 or **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 (AC Power Supply)	110	240	VAC. 50/60HZ
Device Input (DC)	12	48	VDC
Power Consumption	200	500	mA

Network

System Communications	Min	Max	Unit
Ethernet RJ-15	10	100	Mbps
Bluetooth Signal Frequency	2402	2480	MHz
Bluetooth Wireless Range*	-	120*	Feet
LTE Signal (M2M LTE CAT1)	Various	Various	MHz
LTE Wireless Range	-	Tower and Location Dependent. Requires 2 bars of signal for reliable operation ^	Feet

** Male-Female USB Extension Cable allows extending the Bluetooth radio up to 100ft from the base unit*
^ Male-Female SMA Extension cable allows extending the LTE antenna up to 100F from the base unit

Dimensions

Part	Length	Width	Height
All	5.00" (127 mm)	4.25 " (108 mm)	1.37 " (35 mm)

Environmental

Type	Min
Ambient Operating Temperature	-4°F to 158°F (-20°C to 70°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)

Certifications

Regulatory	Description
USA	Base Unit: FCC/ROHS/CE LTE: CE, FCC, PTCRB, Verizon Wireless, AT&T BLE: FCC, IC, BQB

PORTS USED

Port	Use
All web content (hXps used exclusively for content	TCP/44
EMQTT protocol access RAB secure remote monitoring/management and firmware update (limited access, secured)	TCP/188 TCP/8883(EMQTTS certificate verification port, which is open when required
Firmware upgrade (file, minio	TCP/900
Remotely access the RAB through ngrok for device management and monitoring	TCP/82 ngrokd generates HTTP management page links using port 82 TCP/82 ngrokd generates HTTP management page links using port 82 TCP/83 ngrokd generates HTTPS management page links using port 83
AMQP Messaging Server (Avi-on Cloud to local Avi-on network messages)	TCP 5671 (amqp) TCP 5672 (amqp) Resolves over cloudamqp.com and aws.amazon.com
DNS lookup	TCP and UDP 53 (dns). 8.8.8.8 (google.com by default, can be changed) Can be routed through cellular exclusively if desired
Heartbeat only (hXp)	TCP/80 Optional. If Closed, Uses 443

DIMENSIONS