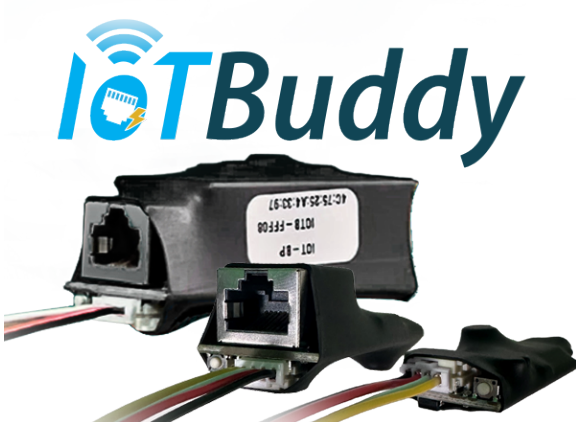
IoT Series

IOT Buddy Device Connectivity Solution

Connects analog or Modbus RTU devices to cloud services, while still allowing BACnet/IP or Modbus/TCP connections for the same points. Facilitates power over Ethernet (POE), Ethernet, or Wireless 2.4 GHz. Small design to allow for installation in sensor housing or junction box. Easy configuration via NFC or the IoTBuddy Hosted Web page.



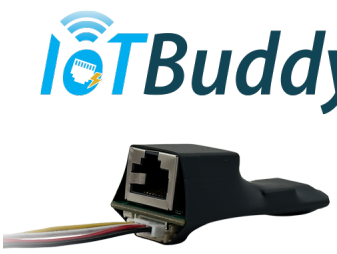
DESCRIPTION

This a compact communicating device for your API, cloud storage, and communication applications. Convert any Modbus RTU or analog signal to Ethernet, Power Over Ethernet (POE), or 2.4 GHz wireless (Wifi) and connect to IOT cloud services (AWS, Azure, MQTT). This connection also allows for local BACnet/IP or Modbus/TCP point hosting via the local IP network. Its small profile and low power requirements allow for field mounting in device enclosures or junction boxes. Use pre-configured sensor data for Senva sensors for fast configuration.

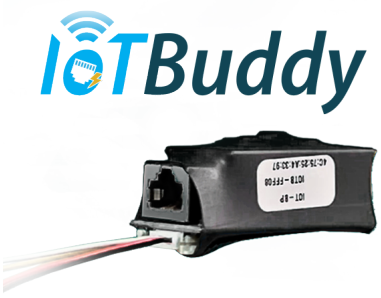
APPLICATIONS

- Allows cloud access to sensor data in remote, network-connected spaces or buildings
- Monitoring of sensors in network-connected retrofits or additions
- Display data on energy management, tenant, or client-facing dashboards
- Perfect for air quality, occupancy, and energy usage reporting
- Add sensor monitoring to critical infrastructure

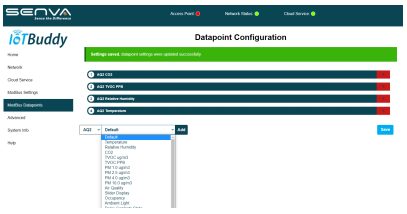
Wireless version connections to (2.4 GHz) networks



Ethernet version connects to ethernet

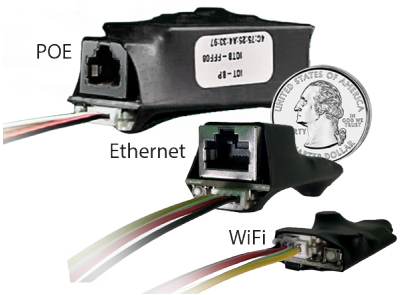


Option for POE (Power over Ethernet)



Choose pre-configured or configure your own

Fits in slim enclosures and junction boxes



Three options to choose from!

FEATURES

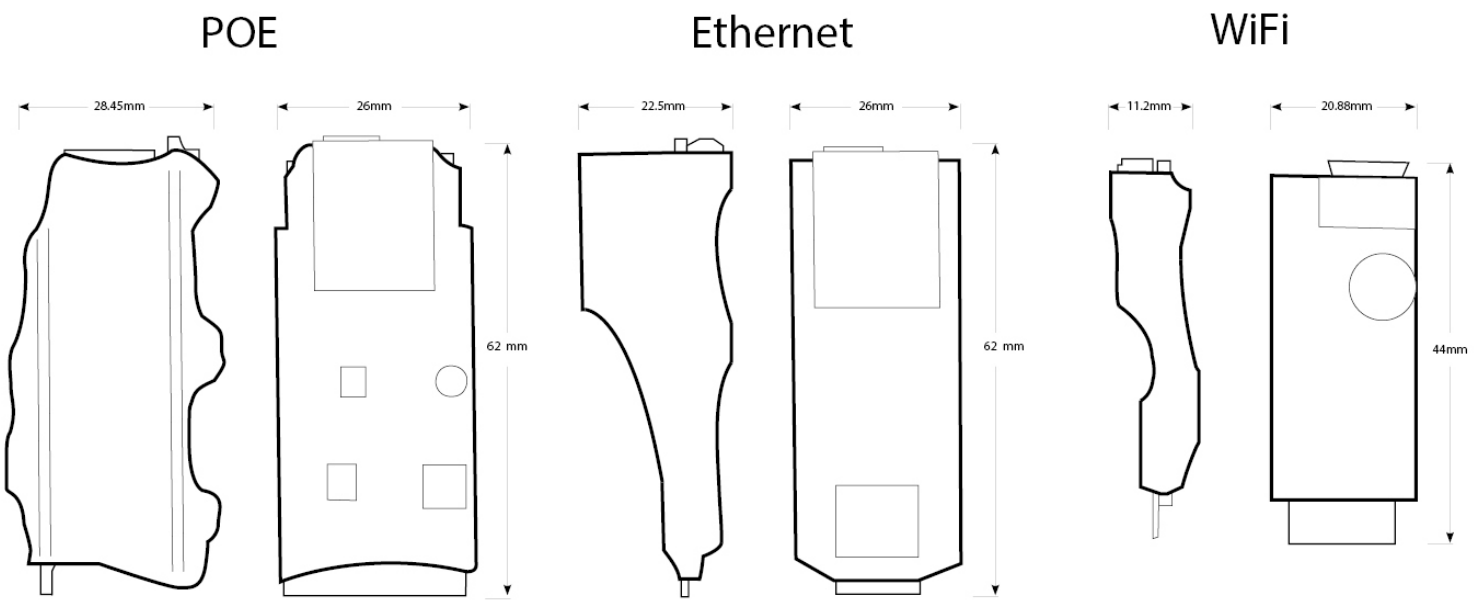
- Allows cloud IOT (MQTT, Azure, AWS) connections for sensors and field devices, with simultaneous BACnet/IP or Modbus/TCP connections across the local IP network.
- Expand your IIOT system!
- Greatly reduces licensing, technician, and panel costs associated with cloud integration of sensors by allowing installation and network connectivity directly at the device location.
- Accepts device connection of either two configurable analog input signals or a single Modbus RTU device.
- Pre-configured setup for Senva sensors and devices can be saved, loaded, and set up via web interface or NFC app.
- Connect via Ethernet or Wireless 2.4 GHz
- Power over Ethernet (POE) version includes power pass-through for powering sensors and allows the connected sensors to be powered from existing POE equipment, utilizing power backups to allow for critical reporting with no added power cost.
- Easily integrate any sensor to existing IT data/BAS/Cloud Service monitoring.
- Monitored sensor data can easily be added to display on energy management, tenant, or client-facing dashboards. This is perfect for air quality, occupancy, and energy usage reporting.
- Wireless version hosts a local access point for easy connection and setup!
- Inputs, network, and cloud connection are configured via web page hosted from the IoTBuddy or via NFC app.
- Connectivity Options: Modbus RS485 to Ethernet RJ45 (Cloud and BACnet/IP or Modbus/TCP), Modbus RS485 to Wifi (Cloud and BACnet/IP or Modbus/TCP), Analog to Ethernet or POE (Cloud and BACnet/IP or Modbus/TCP), Analog to Wifi (Cloud and BACnet/IP or Modbus/TCP).

ORDERING

IoT - ☐ ☐

Input	**Output**
A = Analog	W = WiFi
B = Comms	E = Ethernet
	P = POE

DIMENSIONS



NOT TO SCALE

Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

SPECIFICATIONS

Note: Features and Specifications are for initial release and may change with subequent releases.

Power Supply	4 Wire Flying Leads	Wifi and Ethernet versions: 12-30VDC/24VAC, 1W max, 100mA max. POE versions: powered by ethernet. Accepts 24VDC. Power to Sensor: 24vdc 5W max.
Analog Inputs	2 programmable Inputs	0-10V and 4-20mA (selectable)
LED	Red	**Normal Mode:** Off=Not Configured Steady= No Connection Slow Blink = Connected to device Fast Blink= Connected to cloud service **Setup Mode:** Off=Button Held (Hold for 3 seconds) Slow Blink = Commissioning Mode Fast Blink= Hold to Initiate Factory Reset
Ethernet	RJ45	10/100 BASE-TX IPV4 Static or DHCP IPV6 Static or Dynamic via DHCPv6 or SLAAC BACnet/IP, Modbus/TCP (~ 100 Points Maximum) Cloud Service Connection (~20 Points Maximum)
WI-Fi	2.4 GHz	**AP Mode:** Supports Open, WPA2, WPA-WPA2 Mixed, WPA3, WPA2-WPA3 Mixed networks IPV4 DHCP or Static IP One client Wi-Fi Connection with configurable password Uses Fixed IP for access point during initial setup WPA2-PSK (AES) 30M Range, in unimpeded areas. **Station Mode:** Supports Open, WPA2, WPA-WPA2 Mixed, WPA3, WPA2-WPA3 Mixed networks IPV4 Static or DHCP IPV6 Static or Dynamic via DHCPv6 or SLAAC Configurable SSID lookup Auto-reconnect after network or power loss BACnet/IP, Modbus/TCP (~ 100 Points Maximum) Cloud Service Connection (~20 Points Maximum) 30M Range, in unimpeded areas.
Operating Environment	Operating Temperature	-40 to 158ºF (-40 to 70ºC)
	Storage Temperature	-40 to 185ºF (-40 to 85ºC)
	Humidity	0 to 95% RH (non-condensing)
	Altitude	2,000 Meters
Enclosure	Wi-Fi Model	~ 1”h x 1”w x 0.5”d
	RJ45 Model	~2.4”h x 1”w x 1”d
	RJ45 POE Model	~2.4”h x 1”w x 1.1”d

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