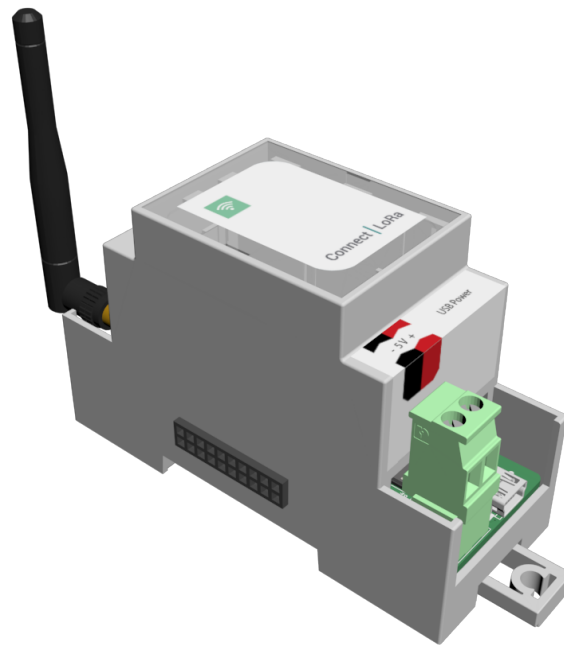


## LoRa Connect Specifications (Hardware V3.0)



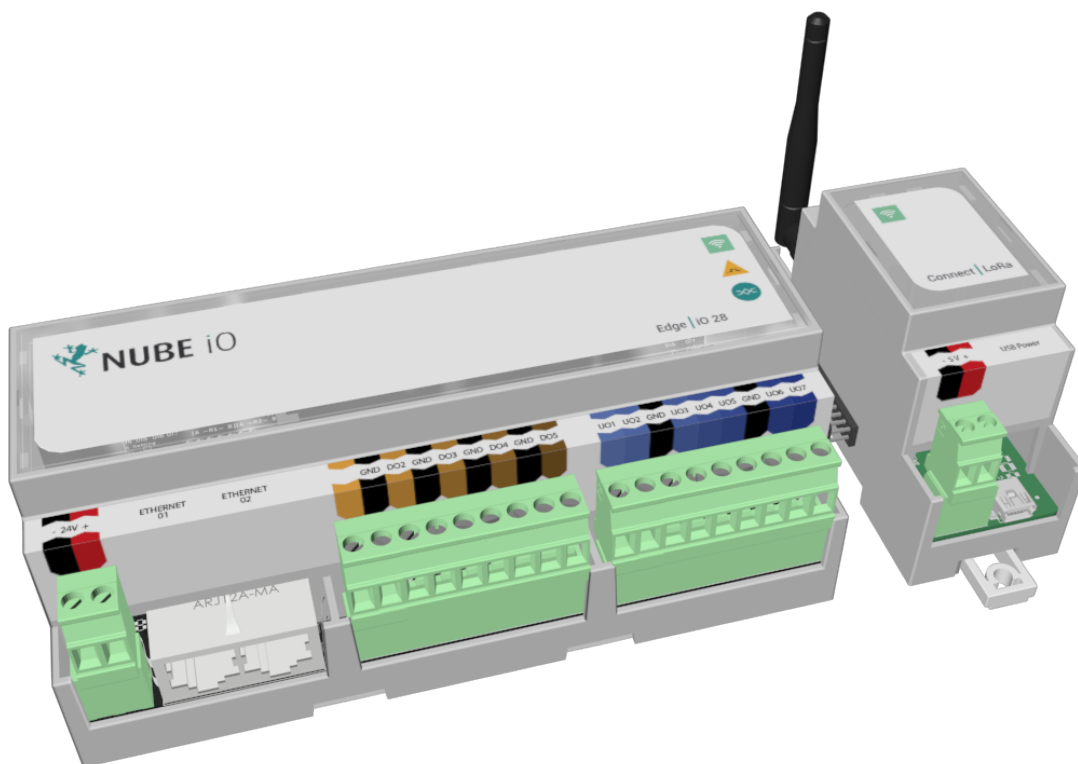
Power Options and Requirements:	
Via Edge Connect	Edge Connect Pins (5V)
Via USB	5V 500mA
Via Terminal	5V DC wired

LoRa Capabilities:	
Supported Frequencies	868/915Mhz
Spreading Factor	6-12
Bandwidth	7.8 - 500 kHz
Effective Bitrate	.018 - 37.5 kbps
Est. Sensitivity	-111 to -148 dBm



<b>Communication Options:</b>	
Serial over USB	Modem will print received messages to serial bus
Edge Connect Module	Modem will print received messages over the "Edge Connect" Serial bus address.

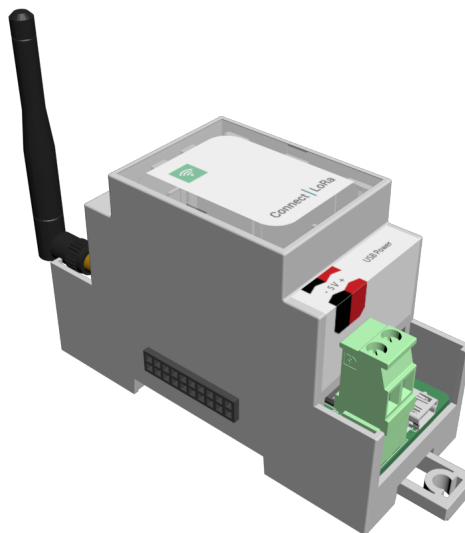
<b>RTC:</b>	
Battery	CR1220
Serial over USB	Modem will print received messages to serial bus
Edge Connect Module	Modem will print received messages over the "Edge Connect" Serial bus address.



## Physical Dimensions and Installation

The Edge connect can be installed as a standalone device, interfaced with USB, or directly with an Nube iO Edge-28 Building Controller. The case is Din-Rail mountable (2 Slot) and the antenna is interchangeable for different applications.

<b>Length</b>	36 mm
<b>Width</b>	90 mm
<b>Height</b>	58 mm
<b>Material Type</b>	Plastic (Polycarbonate)
<b>UL Rating</b>	UL94-V0
<b>IP Rating</b>	IP20
<b>Mounting</b>	DIN Mount



## Overview

The Nube-iO LoRa Connect is a general purpose receiver for LoRa signals. It enables Low-Power wireless communications in 2 primary formats:

- LoRa Nodes (Wireless Sensor ) - > LoRa Connect
- LoRa-Connected Nube-IO Edge unit < - > LoRa Connect

The primary function of the LoRa Connect is to receive, interpret, and then send to a local server or the cloud. The Gateway can be integrated into an Edge device, via the *Connect* port, to send and receive values from another gateway, removing the need to provide network connectivity to every building controller.

Providing wireless connectivity with minimal overhead, reducing time and costs involved with wired infrastructure. Our LoRa Gateway can be integrated in a variety of different ways, providing substantial flexibility when integrating BMS systems. The system supports multiple gateways, meaning a structure can be completely covered no matter the size or type of infrastructure.



## About LoRa

LoRa is a Low-Power, Long-Range wireless technology designed for the Internet of Things. Compared to WiFi, it requires less power and is less affected by buildings and other obstructions, with one Gateway generally being able to provide coverage for a 70mx70m 3-story building.

<b>Frequencies</b>	915Mhz or 918Mhz
<b>Expected Range</b>	Dependant on installation environment, up to 1Km.
<b>Communication</b>	Via Serial (pre-programmed on the Edge-28 as <i>"/dev/loracconnect"</i> )
<b>Watchdog</b>	RTC Messages can be used, along with standard LoRa Messages, to reset the device if necessary.

## About Nube iO

Designed by HVAC controls experts, Nube iO provides a reliable and economical platform to control and monitor your HVAC system. With emphasis on utilizing open platforms and device security Nube iO allows you to break free from restrictive BMS platforms without the huge cost of having to replace existing controllers.

Born in the age of IoT, Nube iO provides you with the ability to access your data from the web. No longer do you need hundreds of sensors or a huge budget in order to get your data online. Whether you have one sensor or thousands, the scalability of the platform makes it economical regardless of the size of your system.

To learn more about our products and solutions, visit: [\*\*nube-io.com\*\*](http://nube-io.com)

