DIRECT2CLOUD
Modbus RTU (RS-485)

Introduction

The Sent.io™ Direct2Cloud I/O gateway is perfect for stand-alone IoT monitoring in a variety of applications including building management, oil and gas, water/wastewater and much more.

Sent.io™ has multiple power options to fit any application. When powered from a field replaceable battery pack, it is a truly wireless IoT gateway that can sample multiple I/O or sensors every 5 minutes and report to the cloud every 8 hours or when an alert condition exists. When powered from external DC (8-24V), Sent.io™ continuously samples all I/O to check for alert conditions, providing near instant alert notifications. Samples are recorded and reported to the cloud every 5 minutes. If uptime reliability is a primary concern, Sent.io™ can be powered from our Whisker.io® MicroUPS™ which provides up to 48 hours of battery backed run time. When Sent.io™ is powered from the MicroUPS™, it can send text/email notifications when main power is lost and restored.

Sent.io™ can be configured with a variety of I/O options including analog and digital inputs and outputs, Modbus RTU (RS-485), and our entire line of 2Smart™ digital sensors which currently include digital temperature, temperature/humidity/pressure, and 3-5M tank level sensors.

Any 3rd party Modbus enabled product can be brought into the Whisker.io® cloud platform using Sent.io™ as a gateway, allowing your customers to control their building and industrial automation systems from anywhere in the world using any mobile device.

Sent.io™ communicates securely to the cloud using a built in 4G Cat M1 modem so it does not require access to customer networks or support from customer IT personnel.
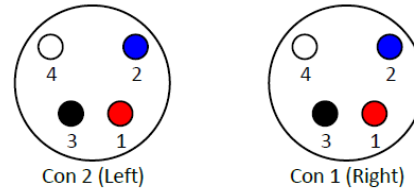
Part Number

P/N	Description
SIO-EX-MC-SE-SIMMNNNN-XR	2x 0-5V analog inputs

Other I/O configurations are available. Please contact sales@d6labs.com or give us a call for more information.
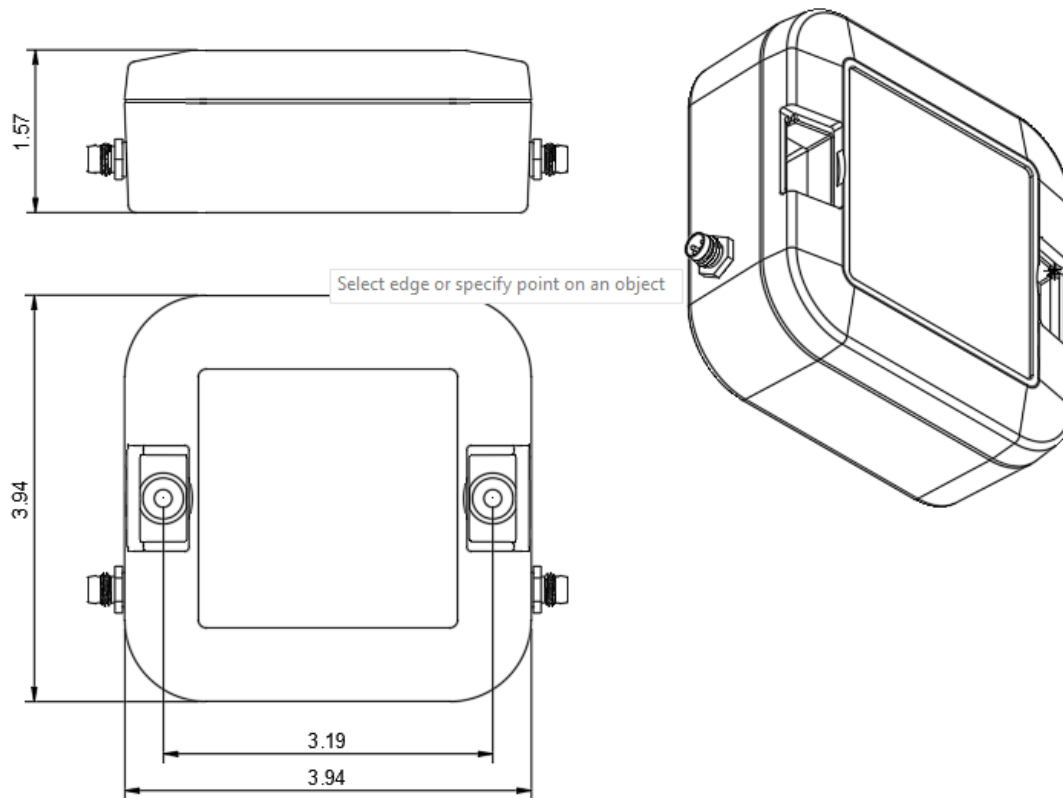
Features

- Modbus RTU (RS-485)
- Up to thirty-two 32-bit words—read and write
- Supports 16/32-bit Word, Float, and 16-bit Bit Field
- Multiple Power Options—DC, MicroUPS
- Direct2Cloud air-gapped communications
- IP67 rated outdoor enclosure (DIN Rail, wall/pole mount)
- Simple to install, easy to use
- 24/7 remote monitoring /control from anywhere

Connector Wiring

Con 2 (Left)   Con 1 (Right)

Connector	Pin	Function	Description
1	1	DC Power In	8-32V
1	2	Power Det	Low when power good
1	3	NA	NA
1	4	GND	Ground
2	1	Vsensor	Sensor Power Out
2	2	A+	RS-485 A+
2	3	B-	RS-485 B-
2	4	GND	Ground

Mechanical Drawings

Select edge or specify point on an object

1.57

3.94

3.19

3.94

* Dimensions are in inches

Key Specifications

Parameter	Minimum	Typical	Maximum	Units
Operating Temp. Range	-40		+85	°C
Analog Input Range	4		20	mA
Power Supply (External DC Power Option)	8		32	VDC
Battery Life (Battery Power Option)	2	8	10	Years[1]
Battery Backup (MicroUPS Power Option)		48		Hours[1]
Power Supply Current—Average		50		mA
Power Supply Current—Peak		1		A[2]

Notes: 1. Depends on installed sensors and operating environment

2. Peak current at 3.6V.

D6 Labs
Engineered IoT Solutions

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