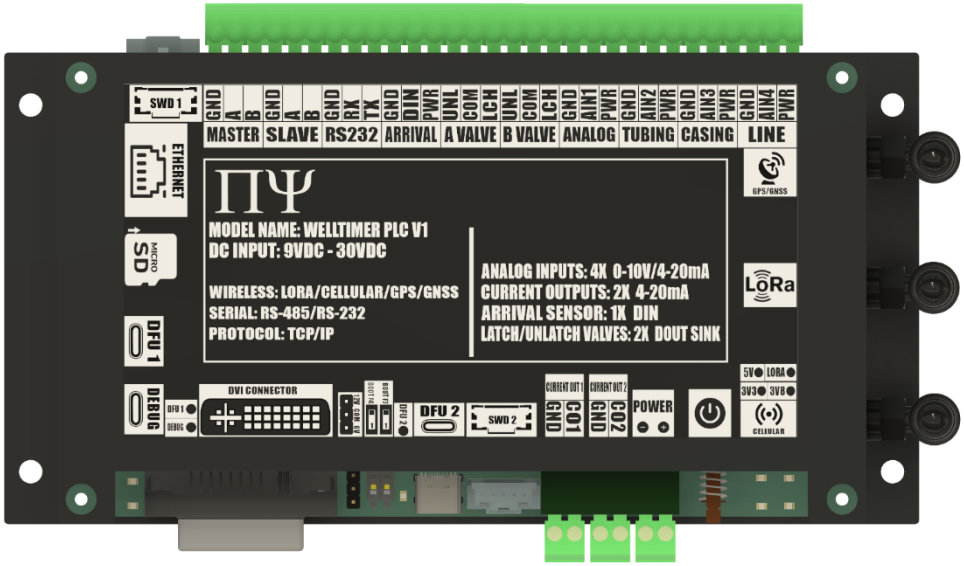
PYTRONIX

Product Datasheet

PYDAQ C400: Multichannel Wireless Programmable RTU



Features

I/O Analog/Digital Ports

- 4x Analog Inputs
- 4x Voltage Outputs

Wired Com Ports

-RS-232 Modbus RTU

-Dual RS-485 Modbus RTU

-Ethernet Modbus TCP

Wireless Communication

-Radio ISM 900MHz RTU

-Cellular LTE 4G MQTT/HTTP

BLE Mobile Applications

-iOS Mobile App using BLE

-Android Mobile App using BLE

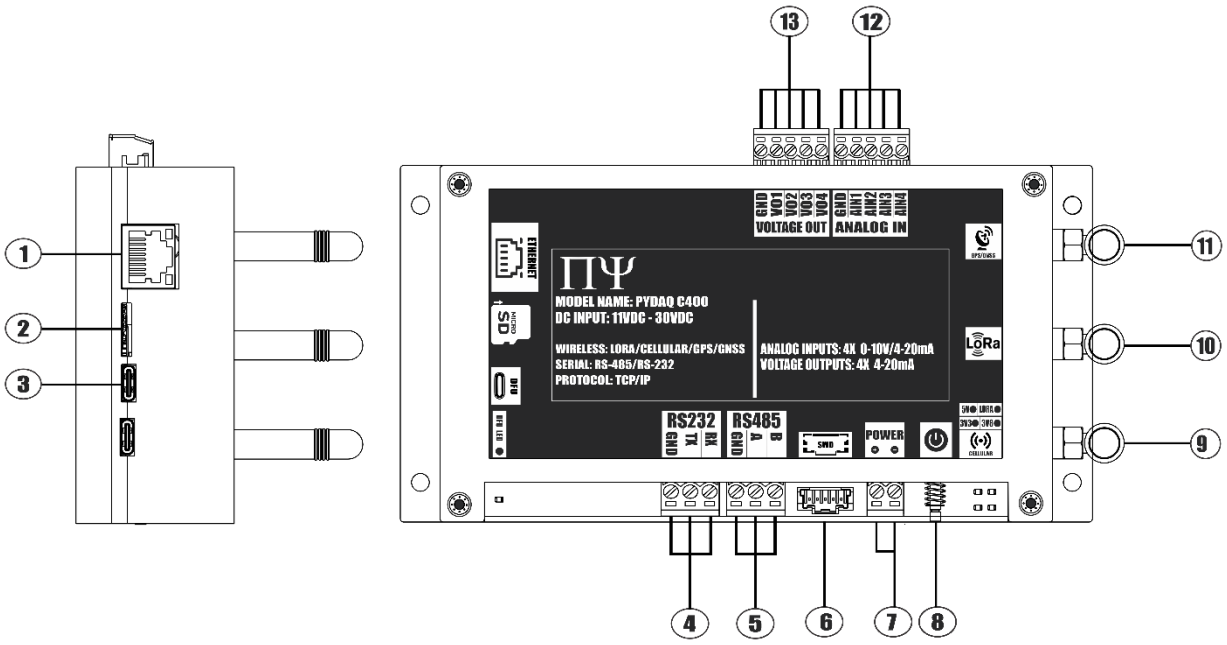
Overview

Pydaq C400 is a wireless 4-channel Analog Input and 4-channel Voltage Output Remote Terminal Unit (RTU) designed for seamless integration with 4-20mA and 0-10V sensors, as well as 0-10V actuators.
This versatile device allows for efficient data acquisition and control, providing compatibility with a wide range of sensor and actuator interfaces. Raw data collected from the sensors can be processed by PytroAI Edge Computing Engine embedded into the device.
Processed data can be accessed via several wired communication options using RS-232 and RS-485 Modbus RTU and using Modbus TCP over Ethernet.

Specifications

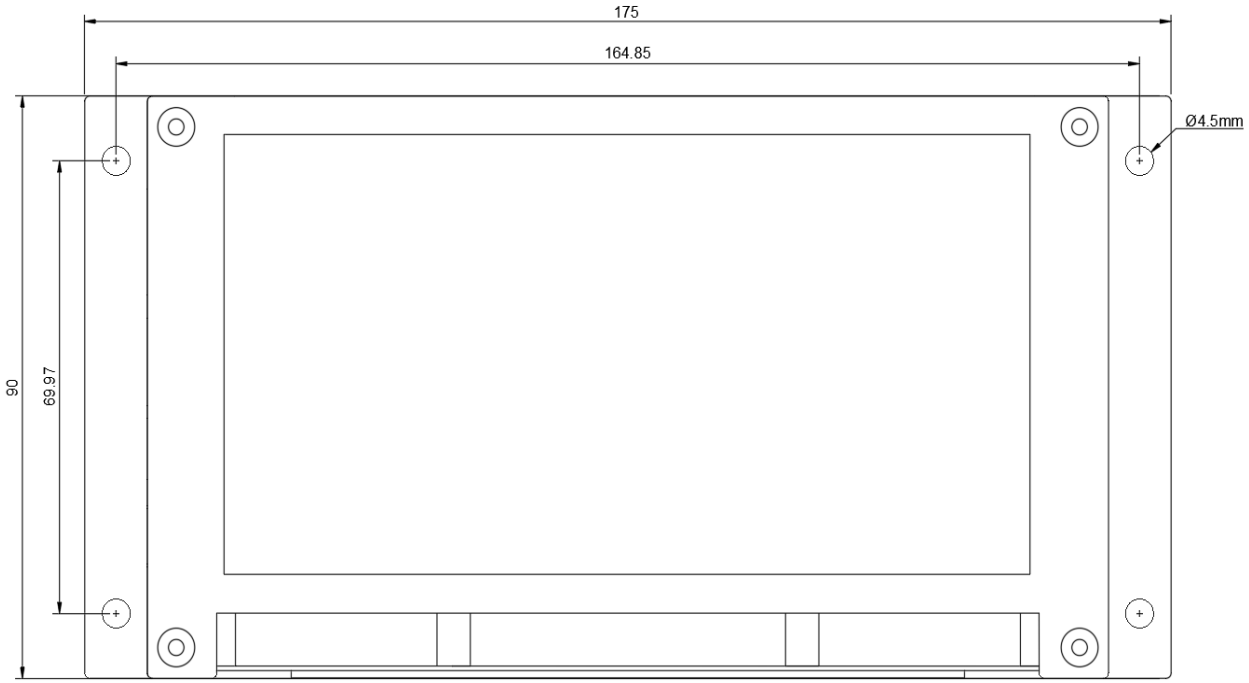
Power	Power Supply Voltage	9-30V
	Power Type	DC-in
	Current Draw	150mA@Typical 3A@Peak
Mechanical	Dimensions	152.05" L x 87.2" W x 1.6" H
	Enclosure	ABS Plastic
	IP Rating	IP 64
Environment	Operating Temperature	-40°C to 85°C
	Operating Humidity	5%~95% Relative Humidity, non-condensing
I/O Ports	Analog Inputs	4x Channel: 0-10V, 4-20mA
	Voltage Outputs	4x Channel: 0- 10V Voltage Output
Wired Communication	RS-232	1x Port: Modbus RTU Master/Slave
	RS-485	1x Port: Modbus RTU Master/Slave
	Ethernet	1x Port: Modbus TCP Master/Slave
Wireless Communication	Radio	900MHz ISM Protocol: Star Topology
	Cellular	LTE 4G Protocol: MQTT/HTTPS
	Bluetooth	2.4GHz ISM Protocol: BLE
Certification	FCC, IC	

Pinout Diagram

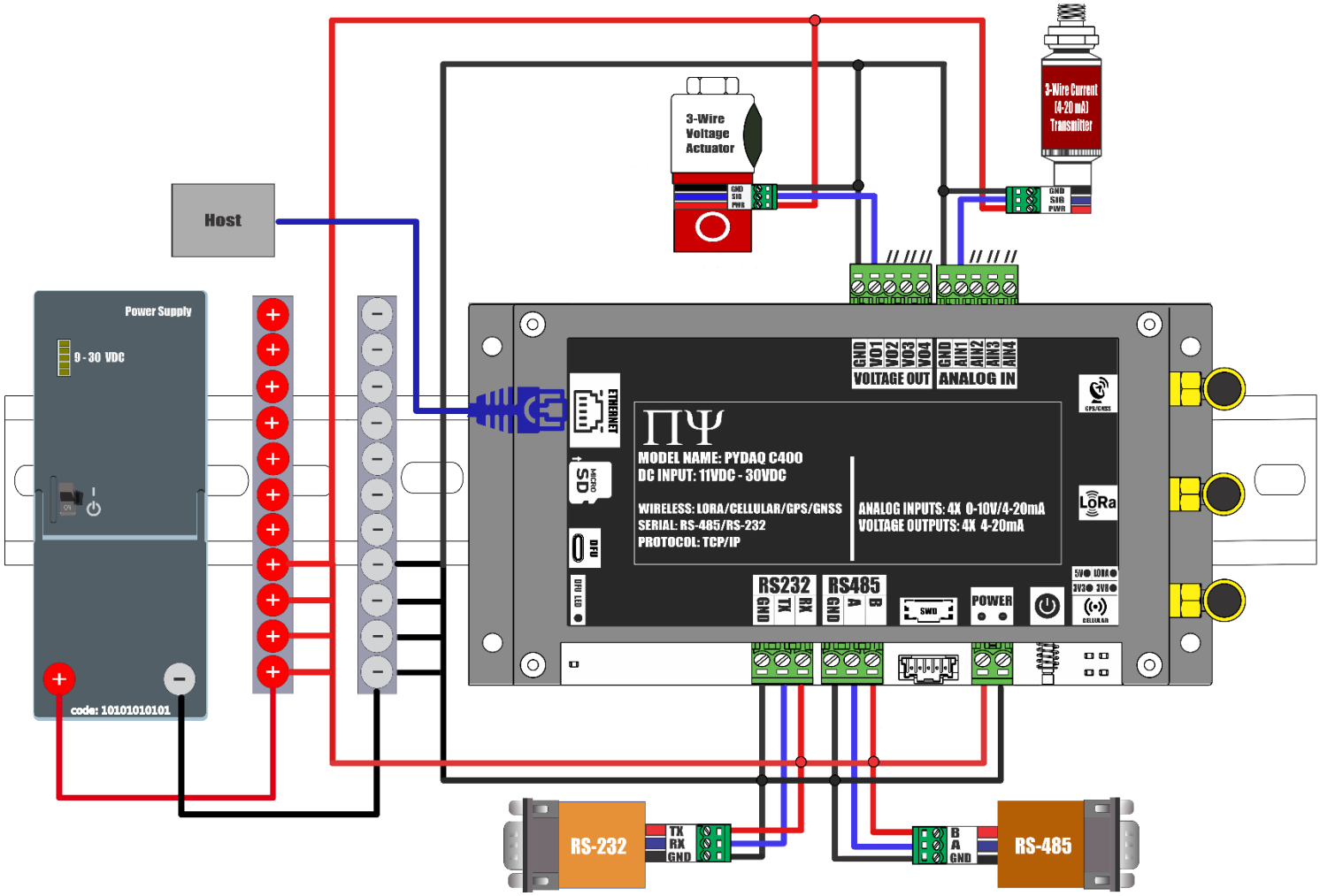


1	Ethernet port
2	Micro SD card slot
3	Programming USB
4	RS 232 Port
5	RS 485 Port
6	SWD Connector
7	Power Connector
8	Power Button
9	Cellular Antenna
10	LoRa Antenna
11	GPS Antenna
12	Analog Input
13	Voltage Output

Mechanical Diagram



Wiring Diagram



Software and Documentation	
Document	**Software Configuration**
Pydaq C400 Operation Manual	Pydaq C400 is configured using a browser based AI assisted tool called PytroAI. PytroAI is accessed by going to https://build.s2c.io/?username=demo The various application notes provide a detailed walkthrough for configuring the PYDAQ C400.
Pydaq C400 Software Manual	
Pydaq C400 Point-2-Point Radio Bridge Application Note	
Pydaq C400 Point-2-MultiPoint Radio Bridge Application Note	
Pydaq C400 Tank Level Monitoring Application Note	
Pydaq C400 Modbus RTU Master Application Note	
Pydaq C400 Modbus RTU Slave Application Note	
Pydaq C400 Modbus TCP Master Application Note	
Pydaq C400 Modbus TCP Slave Application Note	