Specifications

Power source	4.5 – 36 VDC
Wireless interface	Wireless communication requires both wireless cable and CTi USB dongle. Neither of them can connect to another wireless device.
Protection	IP 67 (connector and cable)‡
Material	Connector: brass / nickel Cable molded head: TPU Cable carrier: TPU or nylon Conductor insulation: PVC
Operational Temperature Range	-40°C to +85°C (-40°F to +185°F)

Communication Cable Part Number §

XXX XX – X – X – CS

Interface

G *UART / RS232 / RS422 / RS485*
U *USB*
W *Wireless* **

Length

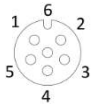
1 *meter*
2 *meter*
3 *meter*
4 *meter (non-stock)*
5 *meter (non-stock)*
6 *meter (non-stock)*
10 *meter (Only PSG)*
15 *meter (non-stock)*
30 *meter (non-stock)*

Type

PSG 6M *Straight*
PSW 6M *Right Angle*

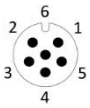
Terminal Assignment

Connector Pins	RS232/UART / USB††	RS422	RS485	Wireless	Wire Color
Pin 1	+Vin	+Vin	+Vin	+Vin	Brown
Pin 2	GND	GND	GND	GND	White
Pin 3	TX	TX+	D+	–	Blue
Pin 4	–	TX-	D-	–	Black
Pin 5	RX	RX+	D+	–	Gray
Pin 6	–	RX-	D-	–	Pink

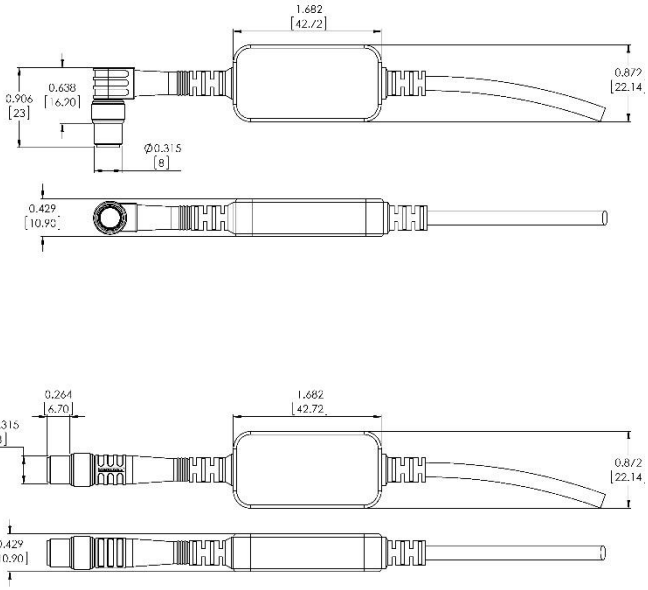


Device:
M 8 – 6-contact
(female)

Cable:
M 8 – 6-pin
(male)



Dimensional Drawing



Inch
[millimeter]

‡ Excluding CTi sensors receiver dongle.

§ Available options for this model are underlined.

**Wireless Module on device side must be powered.

†† USB interface uses UART interface and a UART to USB driver.

Startup Guide

To make proper communication you need to make both hardware and software setup:

1. Hardware setup:

Wireless module has two components: Wireless dongle and wireless power cable.

Wireless power cable

Wireless dongle

To start the device, you need to:

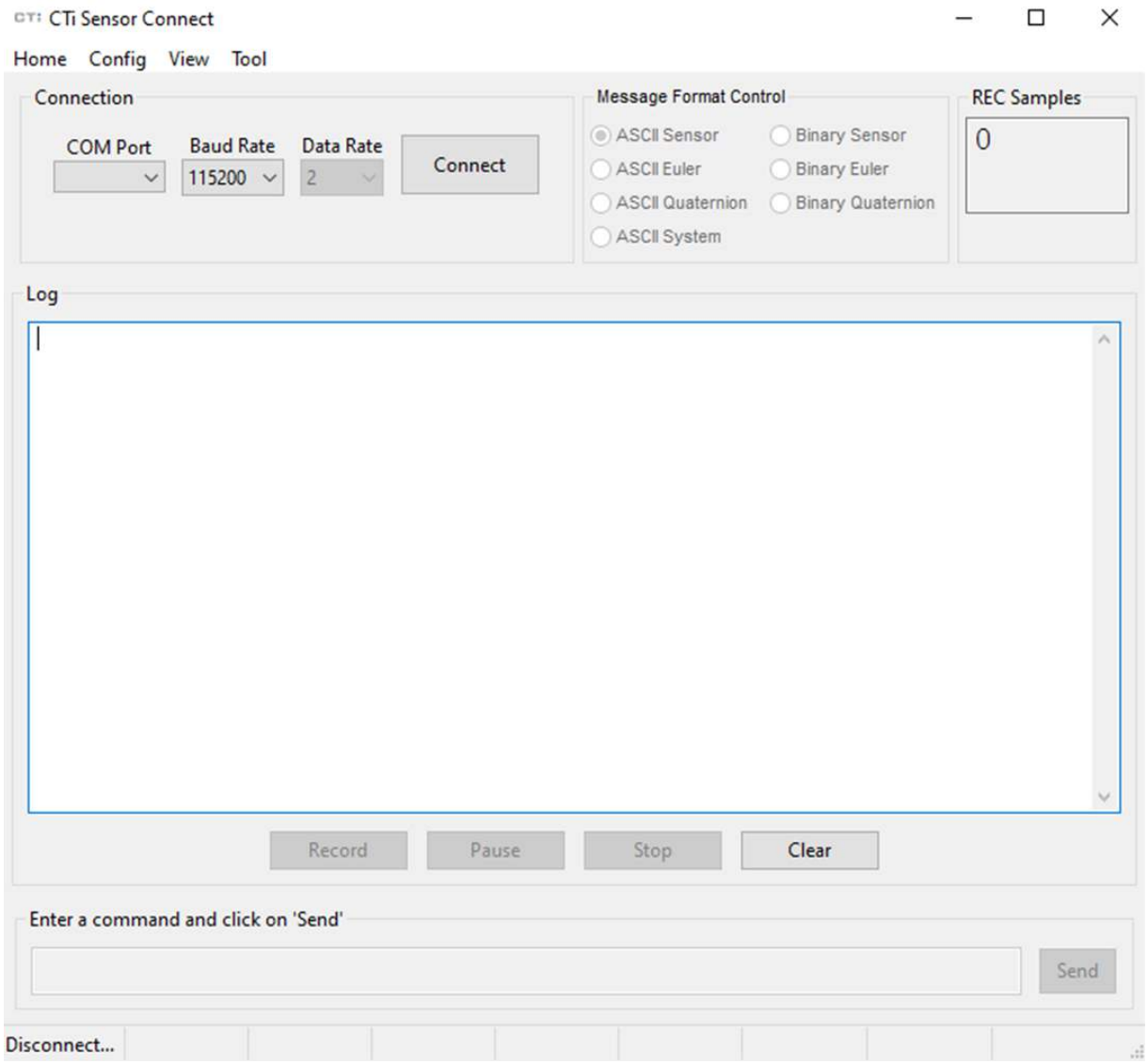
- Insert the wireless dongle to the USB port of your PC.
- Connect the wireless power cable to power supply:

Please note Vin is Brown and GND is white.

2. Software setup

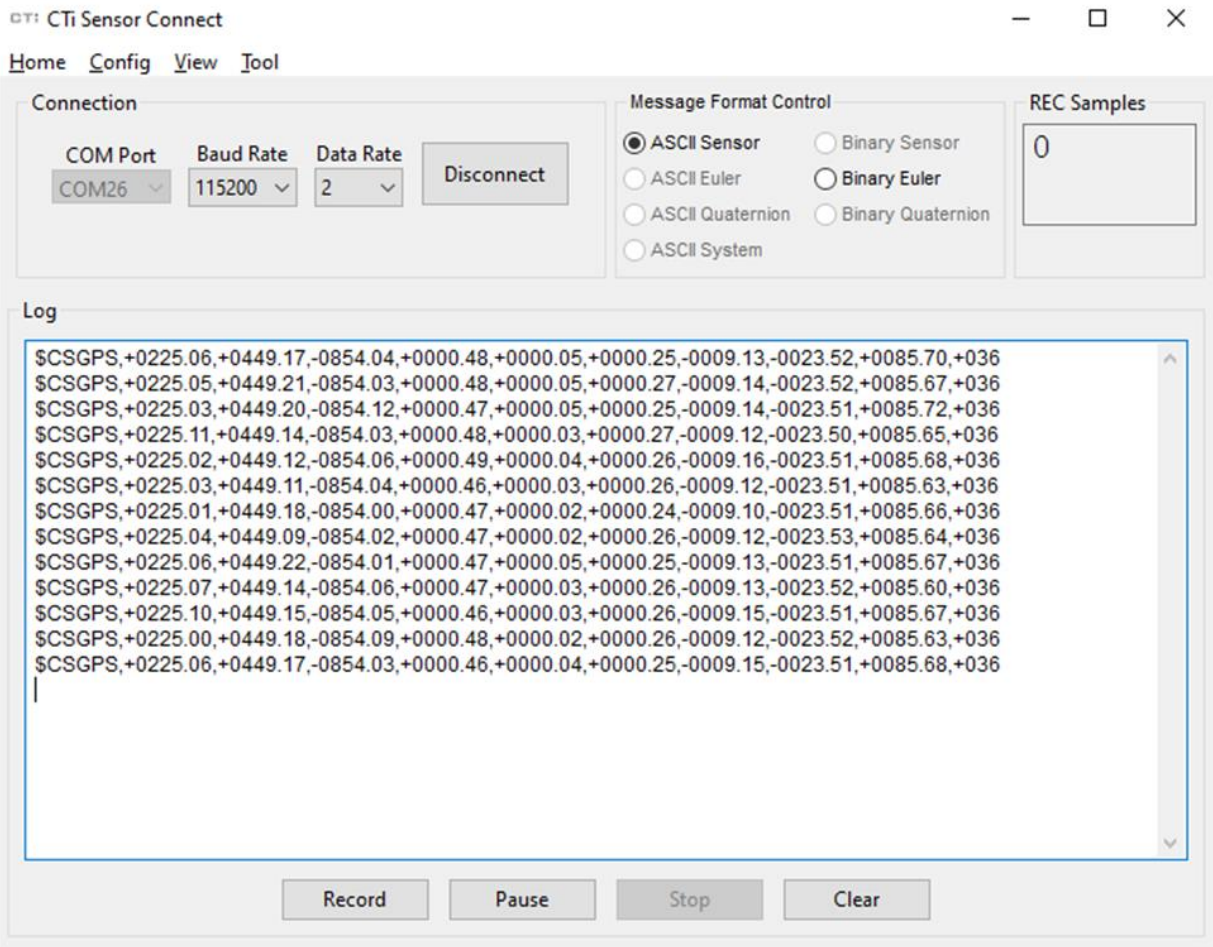
To setup the software please follow up the following steps:

- Download and install the appropriate GUI software, CTi SENSOR CONNECT (CSC) software for IMU, VRU and AHRS devices, WinCTi-Tilt for Tilt-57, and WinCTi-Tilt for all other tilt sensor devices. You can download the software from CTi website.
- Once the installation is successful, open the main panel (the screenshots on this document are captured with CTi SENSOR CONNECT):



CTi SENSOR CONNECT (CSC) software main panel

- Select the following connection parameters and click on Connect once dongle established wireless connection with wireless module. User should select the following Connection parameters for serial communication:
  - COM Port: Select the available COM port
  - Baud Rate: There is only one Baud Rate available. Wireless version only supports 115200bps.
- Once serial communication is established, data stream will be shown on the Log box.



CTi SENSOR CONNECT (CSC) software once data stream is established

Notes:

- The selections in message format control are based on the CTi Sensors product type. Different type of product supports different selection sets.
- Wireless version cannot change baud rate. Do not use the command “$nBxxx*<cr>” to change baud rate.

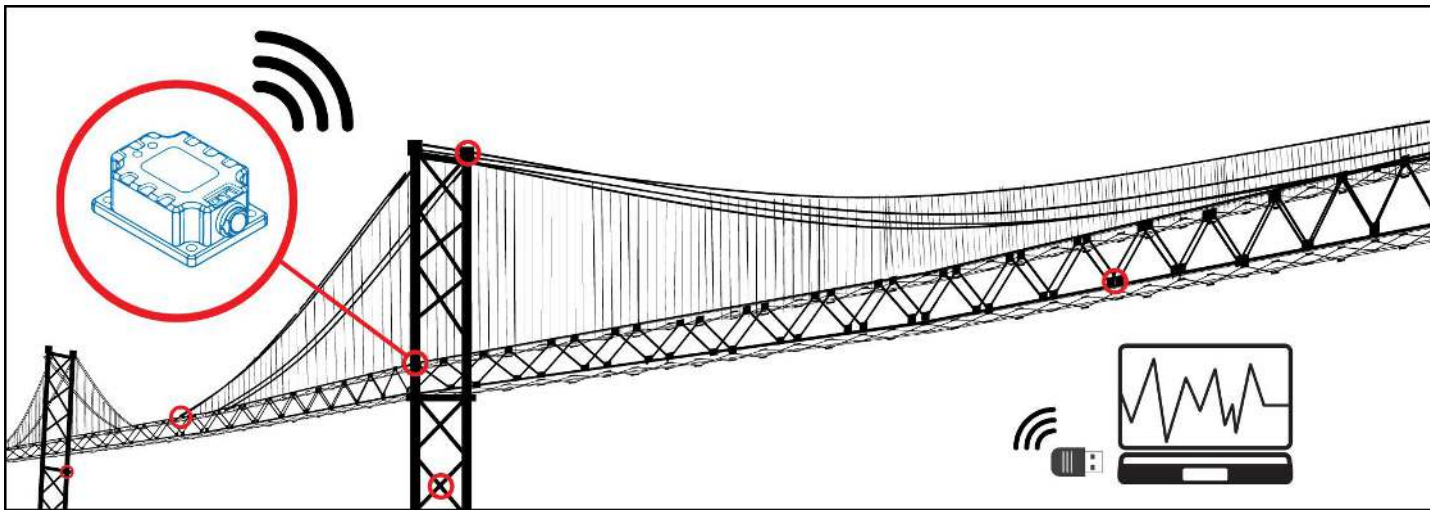
Applications:

Why: Wireless module is specially designed for inaccessible environments, which need remote monitoring.

How: Using wireless module, sensor data are sent remotely from each measurement unit (sensor) to the host (computer) within the 50 m range around the measurement unit.

Where: Structural failures are sudden and catastrophic. Structural Health Monitoring (SHM) is the process of adding damage or distortion detection strategy to the structure, which plays a major rule in public safety. SHM systems consist of an array of sensors connected to a host, which monitors data periodically.

Wireless module provides an easy to use and accessible framework to send and receive sensor data without the need to physically connect sensor modules to host.



Warranty: This product has 18 months limited warranty.
For more information, please visit:
www.CTiSensors.com/warranty

This product is entirely designed and manufactured in the U.S.A.

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