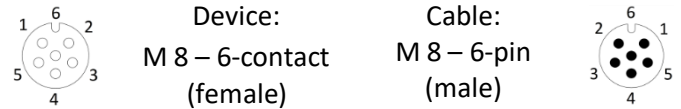




Specifications

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)

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



Communication Cable Part Number [§]

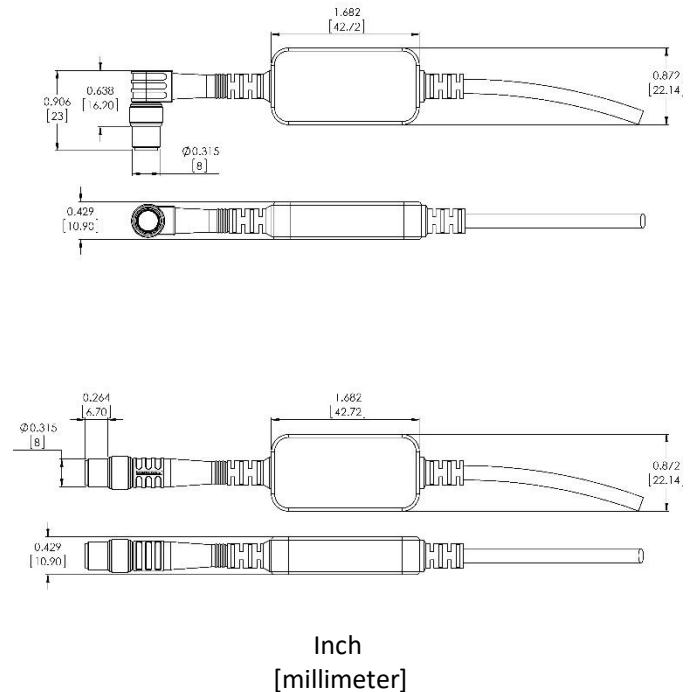
XXX	XX	-	X	-	X	-	CS
			Interface				
			<i>G</i>	UART / RS232 / RS422 / RS485			
			<i>U</i>	USB			
			<i>W</i>	Wireless **			
			Length				
			<u>1</u>	meter			
			<u>2</u>	meter			
			<u>3</u>	meter			
			4	meter (non-stock)			
			5	meter (non-stock)			
			6	meter (non-stock)			
			<u>10</u>	meter (Only PSG)			
			15	meter (non-stock)			
			30	meter (non-stock)			

Type

PSG 6M Straight
PSW 6M Right Angle

Terminal Assignment

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:

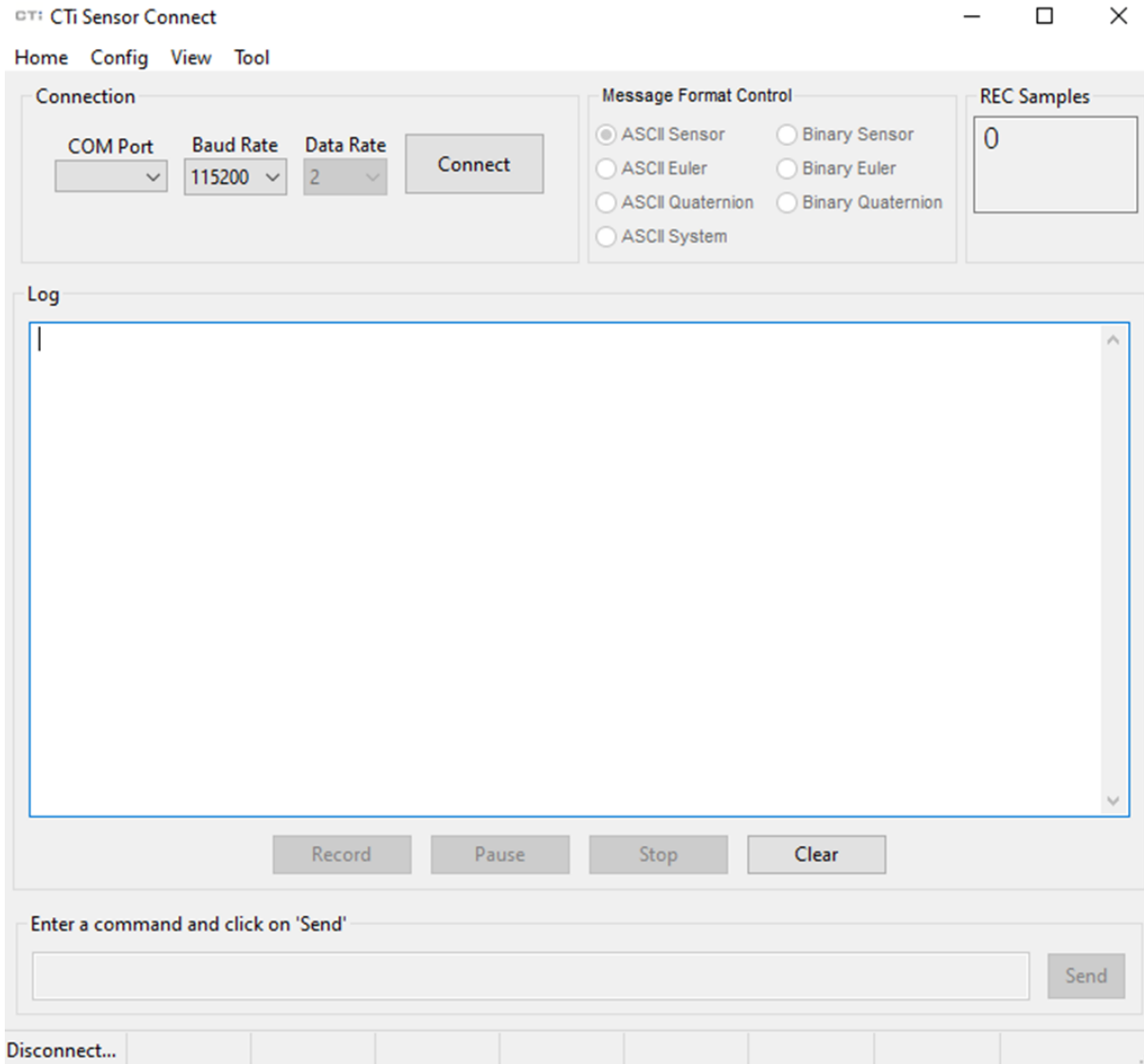
- Insert the wireless dongle to the USB port of your PC.
- Connect the wireless power cable to power supply:

Please note Vin is Brown and GND is white.

2. Software setup

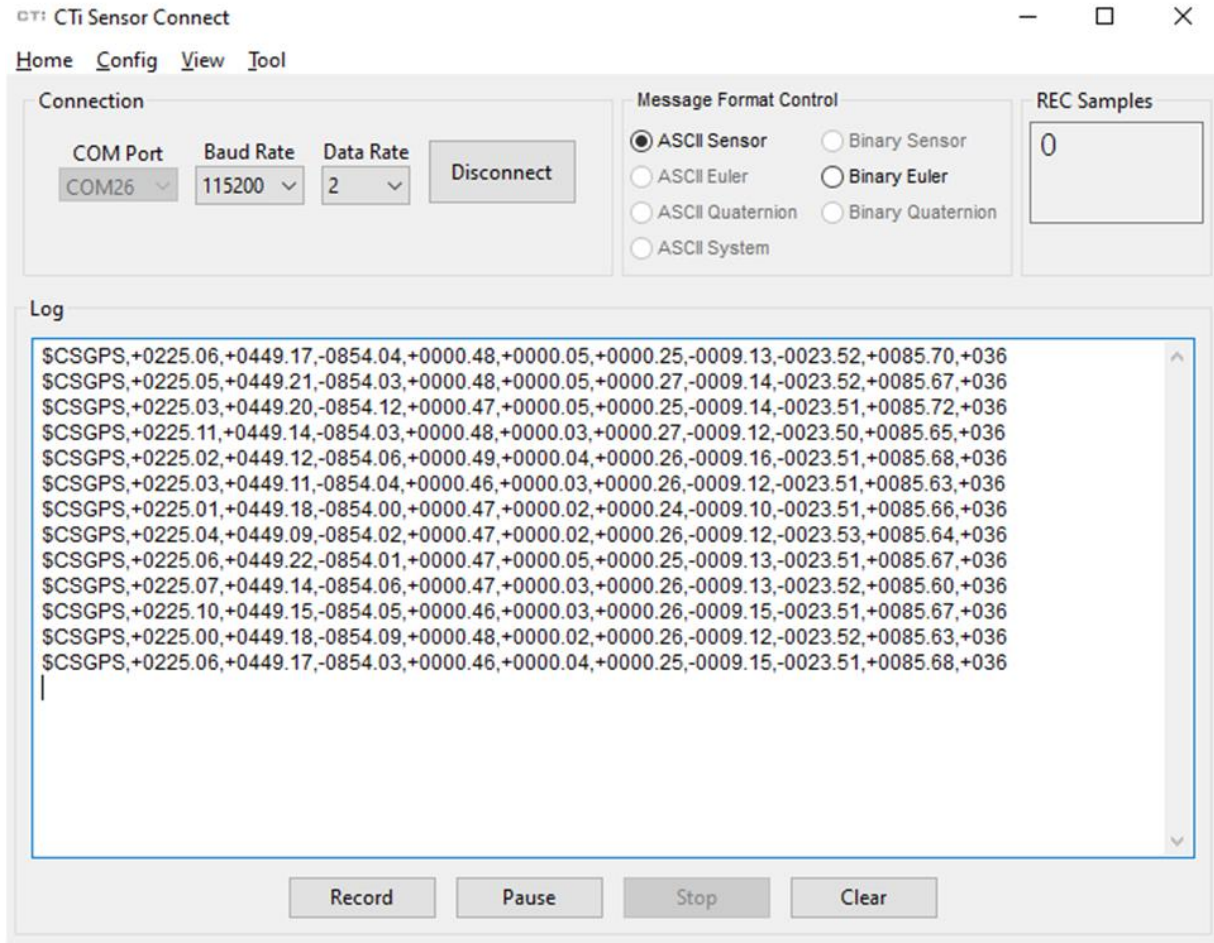
To setup the software please follow up the following steps:

- 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.



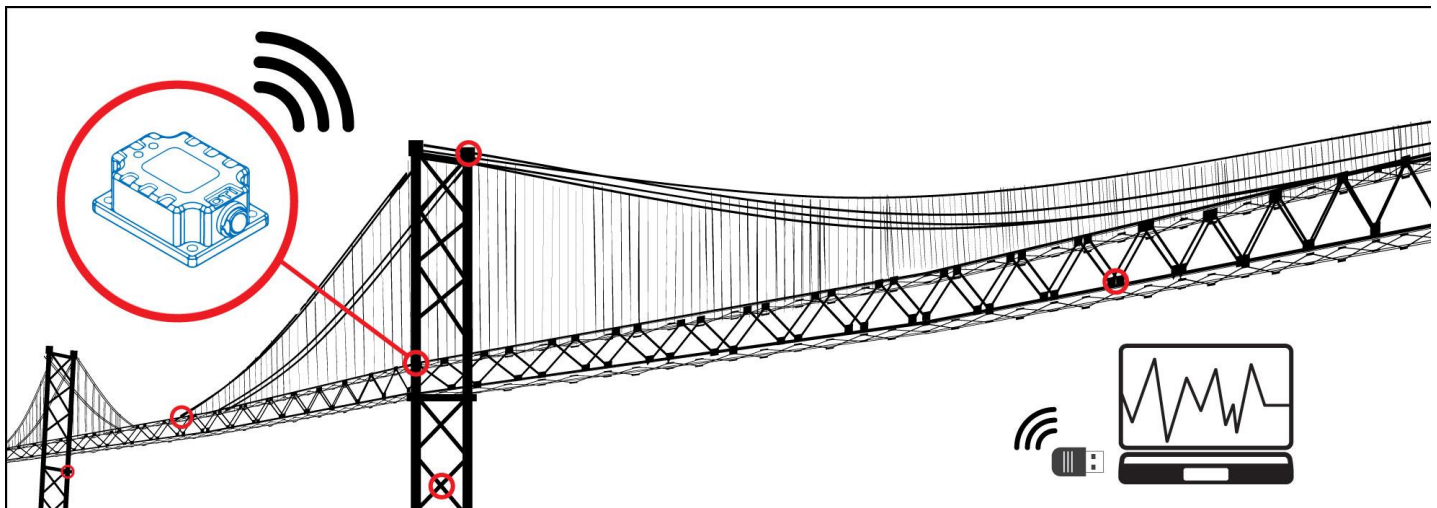
CTi SENSOR CONNECT (CSC) software once data stream is established

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 role 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.

CTI SENSOR, INC.

30301 Emerald Valley Parkway, Unit B
 Solon, OH 44139

Phone: (440) 264 - 2370

Email: sales@CTiSensors.com

All contents of this document are subject to change without any notice.