Model CT2

- Analog, CAN, and Ethernet outputs
- Automated zero and shunt features
- Rugged construction
- Wide range 10 to 36 Vdc power
- Field upgradable by user
- Transforms data from wheel to vehicle coordinates
- Stackable with communication between systems
- Ethernet communication via web browser
- Works with data acquisition software to record data directly to a computer

Description

The *WFT User Interface Electronics (CT2)* provides high level CAN, Ethernet, and analog outputs. The *CT2* accepts either analog or digital signals from the *Wheel Force Transducer (WFT)*. In addition, *CT2* can also accept built in *WFT* accelerometer signals. All the signals together can be transmitted to the data acquisition system or computer through the digital outputs.

Setup of the *WFT* system is done through an embedded webpage and no additional software is required. Firmware upgrades are done by the customer in the field using the same webpage. Coordinate transformation of the data, from wheel to vehicle coordinates, is performed automatically when used on the road. For use on a simulator, wheels do not rotate, and data can be sent directly from the *WFT* without coordinate transformation.

Factory calibration and setup data is read from the *WFT* at startup. The *CT2* updates the *WFT* with every zero, shunt sequence check, and set-up change. Calibration files are stored in the *WFT*, so they never need to be downloaded by the user even if power is interrupted. All *CT2* systems can be interchanged with any compatible Michigan Scientific *WFT*.

When multiple *WFTs* are used on one vehicle, the *CT2* units are stacked together, and communication is shared between electronics. The power requirements are approximately 10 watts per *WFT* system.

8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070
12-29-21
Rev. A

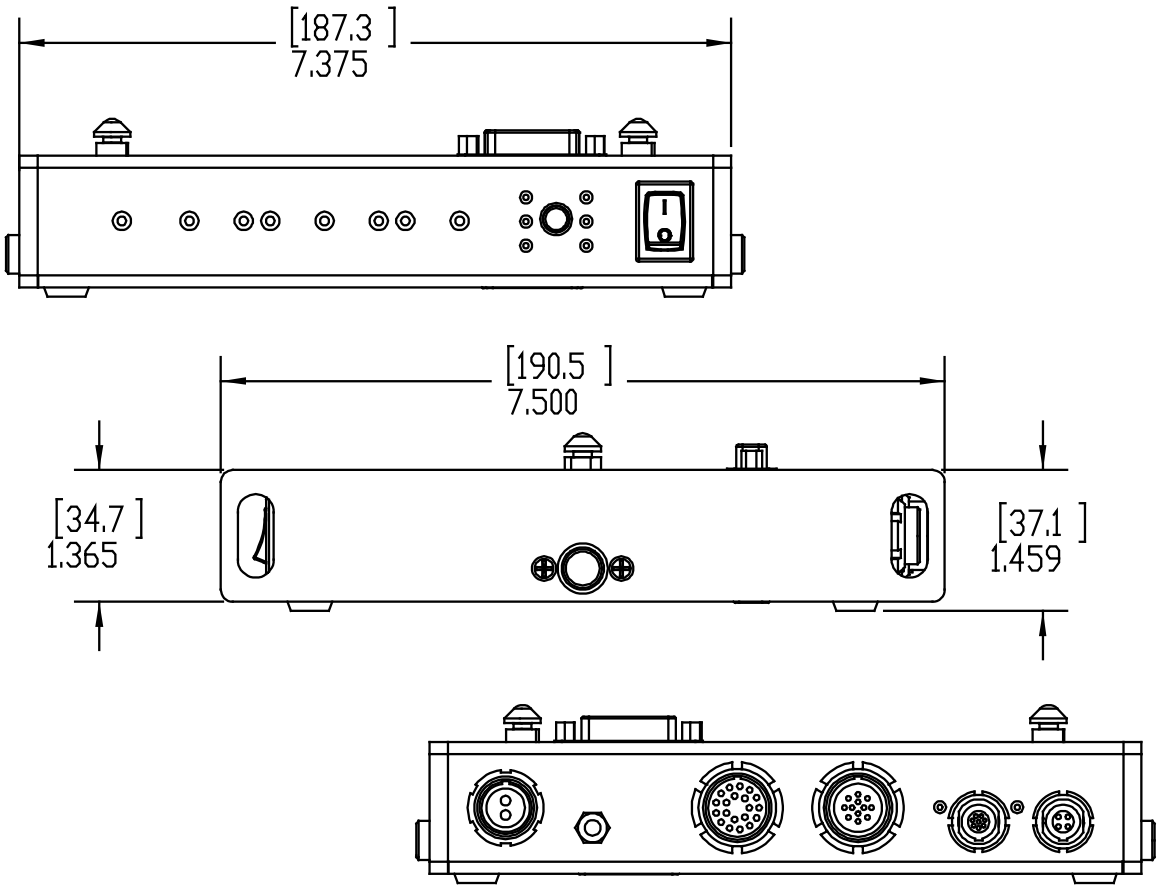
MICHIGAN SCIENTIFIC corporation
http://www.michsci.com
Email: mscinfo@michsci.com

321 East Huron Street
Milford, MI 48381
Tel: 248-685-3939
Fax: 248-685-5406

WFT, User Interface Electronics

Specifications

PARAMETER	SPECIFICATION
Output Formats	CAN: rate selectable 250 HZ to 2500 Hz synchronized between CT2
	Ethernet
	Analog: ±10 V, ±5 V, ±2.5 V, and 0-5 V
Anti-Alias Filter Cut-Off Frequency	5,000 Hz (-3 dB) typical
Input Power Requirements	10-36 V, ~0.75 A at 13.5 V
Software Upgrade	By user via webpage
Analog to Digital Converter (ADC) Resolution	16 bit
Digital to Analog Converter (DAC) Resolution	16 bit
Sample Rate of ADC	62,500 Hz Simultaneous
DAC Update Rate	62,500/s Simultaneous
Input to Output Delay	125 µs typical
Operating Temperature Range	-13°F to +167°F (-25°C to +75°C)
Weight	2.5 lb (1.1 kg)
Size (L x W x H)	7.500 in x 7.375 in x 1.459 in (190.5 mm x 187.3 mm x 37.1 mm)



8500 Ance Road
Charlevoix, MI 49720
Tel: 231-547-5511
Fax: 231-547-7070

12-29-21
Rev. A

MICHIGAN SCIENTIFIC corporation
http://www.michsci.com
Email: mscinfo@michsci.com

321 East Huron Street
Milford, MI 48381
Tel: 248-685-3939
Fax: 248-685-5406