

## 1-818 Vibration Transmitter

### Applications

Industrial turbines  
Remote machinery monitoring  
Turbine-driven power generators  
Gas transmission compressors  
Test Cell Environment

### Features

Three Way Isolation  
Calibrated 4-20 mA output proportion to transducer input  
(specials available on request)  
Buffered output  
Includes high pass and low pass filters  
Signal/cable monitoring



### Description

Simplicity is the goal behind the CEC 1-818 vibration transmitter. The 1-818 is designed for the industrial environment where machine monitoring is important and space is at a premium.

Each 1-818 Vibration Transmitter includes a pre-selected high-pass and low-pass filter designed to remove undesired frequency information from the calibrated output. By providing a calibrated 4-20 mA output signal, the 1-818 transmitter is ideal for use with PLCs, DCs, remote displays or other electronic systems.

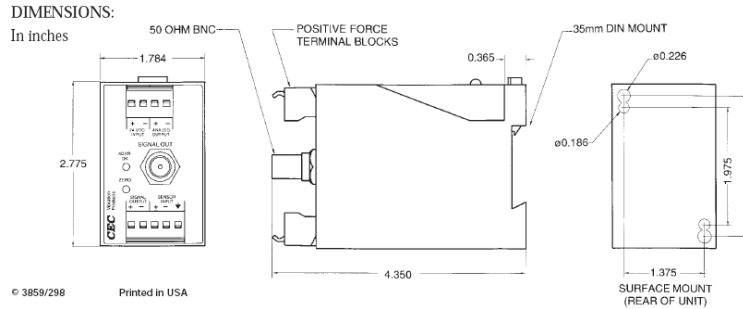
One of the two key features of the transmitter is its ability to monitor the sensor and cable integrity. In the event of a sensor or cable failure the current output will drive to 2.5 mA and the green status LED will be extinguished.

The second key feature consists of a buffered output connection which enables the user to connect across the vibration sensor without affecting the analogue output. On-line vibration analysis and testing of the sensor is now a simple procedure.

### Specifications

<b>Input Voltage:</b>	8v Peak (Maximum)
<b>Sensor Excitation:</b>	3.5mA±0.5 for constant current (IEPE) devices
<b>Output (conditioned):</b>	4-20mA (Active source)
<b>Buffered Output:</b>	Buffered sensor common output is isolated from power & 4-20mA output
<b>Filtering:</b>	42 dB/octave (High & Low Pass)
<b>Sensor/cable Ok Indication:</b>	Green LED indicates the following: Power is applied, Sensor OK, sensor/cable not OK
<b>Loop resistance:</b>	1000Ω maximum
<b>Power:</b>	20 to 32 VDC, three way isolation: Power, Sensor Input, 4-20mA Output
<b>Temperature Range</b>	
<b>Operating:</b>	-40 to 80°C
<b>Storage:</b>	-49 to + 94°C
<b>Connectors:</b>	Positive force terminal block contacts
<b>Weight:</b>	198g (7 ounces)
<b>Hazardous Area Rating:</b>	CSA C/US Certified Class 1, Division 2; Groups A, B, C & D Temp. Code: T3A, Max Ambient 80°C Ex nA / AEx nA IIC T3 X, -40°C ≤ Ta ≤ 80°C Install per drawing 701186





**Example:**

**CEC Part Number:**

**1 - 818 - VS - 145 - 4 5 3 - 2 6**

Input is from a Velocity Transducer @145 mV/ips RMS. The output is 4-20 mA scaled from 0 to 5 inches Per second rms. The BandPass filter is 10 High Pass, 1000 Hz LP

**Input Type**

AC	mV / g	constant current
AM	mV / g	millivolt input
DM	mV / mil	millivolt input
VC	mV / ips	constant current
VM	mV / ips	millivolt input
VS	mV / ips	DC self generating

**Sensitivity**

010 - 099

**Analog Output**

4 4 - 20 mA

**Output Mode**

1	g's pk	5	ips, RMS
2	ips, pk	6	mm/s, pk
3	mils, pkpk	7	mm/s,RMS
4	g's RMS	8	µm, pk-pk

**Full Scale Range**

1	0 - 1	5	0 - 20
2	0 - 2	6	0 - 50
3	0 - 5	7	0 - 100
4	0 - 10	A	0 - 40

**High Pass Filter**

**Low Pass Filter**

0	None	0	None
1	5 Hz	1	50 Hz
2	10 Hz	2	70 Hz
3	20 Hz	3	100 Hz
4	50 Hz	4	200 Hz
5	100 Hz	5	500 Hz
6	200 Hz	6	1000 Hz
7	500 Hz	7	2000 Hz
8	1000 Hz	8	5000 Hz
9	2 Hz	9	300 Hz
A	15 Hz	A	12,000 Hz
B	70 Hz	B	350 Hz
		C	3000 Hz
		D	9600 Hz