1-895M

Multi-Channel Digital Vibration Monitor

Applications

- **Industrial Fans**
- **Compressors**
- **Centrifugal Pumps**
- **Motors**
- **Cooling Towers**

Features (Per Channel)

- **Dual Alarms**
- **3-digit LCD display**
- **30-second start-up trip delay, prevents false alarms**
- **4-20 mA output**
- **Velocity or Displacement response**

Monitoring Systems

Description

The 1-895M is a versatile multi-purpose Vibration Monitor, featuring solid state electronics. The 1-895M is available in a variety of input/output configurations.

The 1-895M constantly monitors the vibration levels on critical machinery and provides timely feedback in the event of machine breakdown. There is a 30-second monitor start-up delay that is initiated by the application of power or the grounding of the start input at which point the delay does not begin until the start input is released.

The active vibration level for each channel is displayed on individual 3-digit displays, and each channel provides a proportional 4-20 mA current loop output. The alarm levels are easily set via two front-panel push-buttons located next to each channels display. Two alarm indicators are present and indicate when an alarm level is exceeded and the corresponding alarm relay will also be enabled. The alarms are latched and must be reset at the 1-895M or via an optional external remote alarm reset input.

CEC Vibration Products • 746 Arrow Grand Circle • Covina, California 91722 • USA
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Rev. 15265

1-895M Multi-Channel Digital Vibration Monitor

Performance Specifications

Vibration Range:	See ordering guide Section C
Frequency Range:	2 Hz to 1000 Hz
Display Accuracy:	±5%
Sensor Input:	100mV/g or /ips See Ordering Guide Section A 3.5V max
Alarm Setpoints :	User programmable 0 - full scale
Alarm Contact State:	User programmable NO or NC NO = Power Off State
Alarm Contact Rating:	See Ordering Guide Section B
Alarm Latch:	User programmable Non-Latching or Latching
Alarm Outputs:	Dual alarm relays are isolated from system electronics
Analog Output:	4-20 mA current loop proportional to the full scale output
Alarm Reset / Start Inputs:	External inputs must be shorted to common to activate
Display:	3-digit LCD display
Power:	100-240 VAC 50/60 Hz
Temperature Range	
Operating:	0°F to +150°F (-18°C to +65°C)
Storage:	-67°F to +185°F (-55°C to +85°C)
Humidity:	0 to 95% relative humidity non-condensing
I/O Connections Per Channel	
Analog Output:	4-20 mA+ Common
Control Inputs:	Start Input Reset Input
Alarms:	1 Out - 1 Out + 2 Out - 2 Out +

Ordering Information

In keeping with CEC's policy of continuing product improvement, specifications may be changed without notice.

	CH 1		CH 2		CH 3		CH 4	
1-895M-	A B C C	-	A B C C	-	A B C C	-	A B C C	

ORDERING GUIDE

A B C C

A — SENSOR INPUT TYPE

1 =	100 mV/g	constant current (use with CEC model 4-160)
2 =	100 mV/ips	constant current (use with CEC model 4-161)
3 =	100 mV/ips	velocity coil
4 =	145 mV/ips	velocity coil (use with CEC model 4-130/137, 4-131, 4-138-0002)
5 =	150 mV/ips	velocity coil (use with CEC P/N 4-131-0103, 4-138-0003)
6 =	200 mV/ips	velocity coil (use with CEC P/N 4-131-0116, 368925, 4-138-0004)

B — RELAY TYPE (Solid state, Optically isolated)

0 = DC contact rating is 3 to 60 VDC @ 1 Amp
1 = AC contact rating is 12 to 240 VAC @ 1 Amp

C — OUTPUT TYPE (Full Scale Range & Unit of Measure)

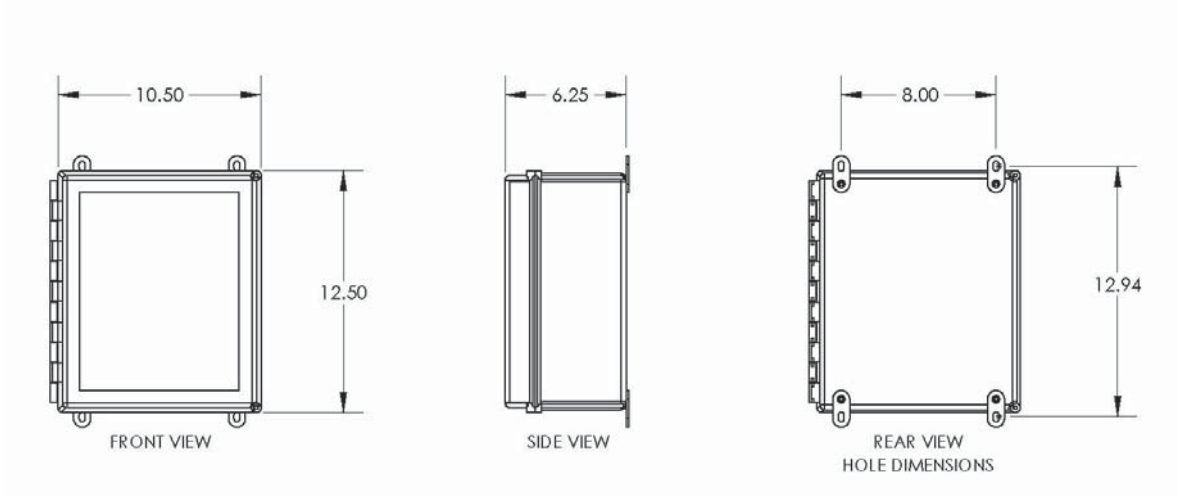
Displacement	Velocity	Acceleration	Velocity (Metric Units)
0 2 = 0-10 mils, pk-pk	1 0 = 0- 0.5 ips, peak	2 1 = 0- 5 g's, peak	3 1 = 3-40 mm/s, peak
0 3 = 0-20 mils, pk-pk	1 1 = 0- 1 ips, peak	2 2 = 0- 10 g's, peak	3 2 = 6-80 mm/s, peak
0 4 = 0-150 mils, pk-pk	1 2 = 0- 2 ips, peak	2 3 = 0- 25 g's, peak	
0 5 = 0-100 mils, pk-pk	1 3 = 0- 5 ips, peak	2 5 = 0- 5 g's, rms	
	1 4 = 0- 10 ips, peak	2 6 = 0- 10 g's, rms	
	1 5 = 0- 1.5 ips, rms		
	1 6 = 0- 3 ips, rms		

NOTE: Special configurations can be accommodated. Please consult the factory for assistance.

	Channel 1		Channel 2		Channel 3		Channel 4	
Example: P/N 1-895M-	1 0 2 2	-	1 0 1 2	-	4 0 1 3	-	4 0 1 3	

The example unit includes four channels. Each channel is configured independently of the others by selecting the appropriate Sensor Input, Relay and Output from table sections A, B and C respectively.

For applications with less than four channels, enter 0000 for the extra channel(s).



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