

CMCP590(A) Acceleration Enveloping Transmitter/Monitor



Transmitter Features:

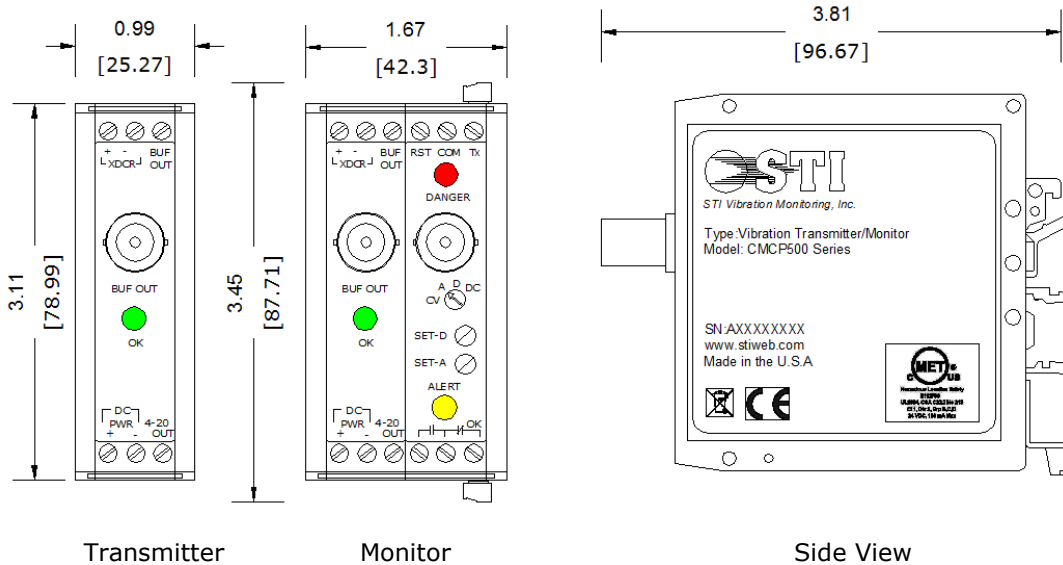
- Enveloping Output (gE)
- Accelerometer Input
- 3 Ranges and 3 Bandwidths
- 4-20mA Output
- Two Buffered Outputs
- Class 1 Division 2, Groups B-D
- CE Approved

Monitor Features:

- OK, Alert and Danger Alarms
- 5A @250VAC Relay Outputs
- Latching or Non-Latching Alarms
- Trip Multiply (2x or 3x)
- Selectable Time Delay
- API 670 Compliant

The **CMCP590 Enveloping Transmitter** and **CMCP590A Enveloping Monitor** are compatible with industry standard 100 mV/g accelerometers and provide an output in terms of Acceleration Enveloping or "gE". The accelerometers dynamic signal is processed using one of three filter sets into a 4-20 mA output that is proportional to the overall "gE" range selected. The 4-20mA signal can then be sent to the Plant PLC/DCS or other control system. An OK Fault Detection Circuit is provided along with a Timed OK Danger Defeat Circuit to prevent false alarms. The CMCP590 can be optionally ordered as the CMCP590A Monitor and be equipped with the optional alarm module that provides OK, Alert and Danger Alarms, along with relays, adjustable time delays and adjustable set points for standalone machine protection.

Dimensions:



CMCP590(A) Acceleration Enveloping Transmitter/Monitor

Specifications:

| Electrical Specifications: | CMCP590 |
|--------------------------------------|---|
| Input: | 100 mV/g Accelerometer |
| Output: | 4-20 mA DC Proportional to Velocity (600 Ohms max. resistive load) |
| Selectable Filter Bandwidths: | Filter #2: 50 to 1,000 Hz Filter #3: 500 to 10,000 Hz Filter #4: 5,000 to 40,000 Hz |
| Power: | +24 VDC 50 mA max. Transmitter (100 mA max. Monitor) Reverse Polarity and Transient Protected |
| Accuracy: | 1% Full Scale |
| Selectable Ranges: | 10.0, 30.0 or 80.0 gE |
| Signal Detection: | Enveloping |
| Sensor Power: | Internal 4.4 mA Constant Current Diode (Selectable Off/On) |
| OK Circuit: | Green LED (On = OK), Not OK = Off and 4-20 mA < 2.0 mA |
| Timed OK Danger Defeat: | 30 Seconds on Power Up or Loss of OK (Alert and Danger) |
| Buffered Outputs: | Active Buffer, BNC and Terminal |
| Case: | Isolated |
| Terminals: | Screw Type, 24 AWG min., 12 AWG max. |
| Environmental Specifications: | |
| Operating Temperature: | -20°C to +80°C (-4°F to +176°F). |
| Storage Temperature: | -40°C to +95°C (-40°F to +203°F) |
| Relative Humidity: | 0 - 95% Non-Condensing |
| Mechanical Specifications: | |
| Mounting: | 32 mm (G style) or 35 mm (T style) DIN Rail. |
| Dimensions: | 0.99"W x 3.11"H x 3.81"D (25.27 x 78.99 x 96.67 mm) Transmitter 1.67"W x 3.11"H x 3.81"D (42.3 x 78.99 x 96.67 mm) Monitor |
| Weight: | 0.21 lb./0.40 lb. w/Alarm Module (0.095kg/0.18kg) |
| Certifications: | CE, RoHS, CSA & UL Approved Class I Division II B-D |

| Optional Alarm Module (Monitor): | CMCP590A |
|---|--|
| Number of Alarms/Relays | 3 - OK, Alert and Danger |
| Alarm Indication: | OK = Green LED, Alert = Yellow LED, Danger = Red LED |
| Relay Specification: | 3 - Form C, SPDT, 5 Amp 30 VDC/250 VAC, Latching or Non-Latching |
| Alarm Time Delay: | Separately Selectable 0.1, 1.0, 3.0 6.0 10.0 Seconds |
| Trip Multiply Function: | Terminal for None, 2X or 3X Alarm Limit Trip Multiply |
| Reset Function: | Terminal for Remote Reset if Latching Alarms Selected |
| Bypass Function: | Hold Reset to Common |
| Display Output: | 0-5 VDC Switch Selectable Current Value, Alert and Danger Setpoint |

Ordering Information:

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| CMCP590 | Enveloping Transmitter |
| CMCP590A | Enveloping Monitor |



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