Universal Transmitter
Fully Programmable with Current Output, Voltage Output, and Two Relay Outputs

- Provides Loop Power for Two-wire, 4-20 mA Sensors and Transmitters
- Accepts mA, VDC, RTD, TC, Linear Resistance, and Potentiometer Inputs
- Delivers Current and Voltage Output Signals
- Offers Two Set Points with Form A Relay Outputs (2 amp AC, 1 amp DC)
- Fully Programmable via Detachable Pushbutton Display
- Operates from 19.2 to 300 VDC or 21.5 to 253 VAC power

Model 682A06 is a DIN rail mounted, general purpose, universal transmitter for industrial monitoring, control, and alarm requirements. It accepts a variety of sensor input signals and provides excitation voltage for two-wire, loop-powered sensors and transmitters. This unit is especially well-suited for industrial machinery protection and vibration monitoring applications with IMI Sensors’ Series 640 loop-powered, 4-20 mA industrial vibration sensors.

Model 682A06 operates as a blind transmitter and delivers VDC, isolated mA, and relay outputs; however, it may be fitted with an optional display module (Model 070A80) to view measurement data. The display module also offers pushbutton programmability of many setup parameters, including: zero, span, set point threshold, set point hysteresis, and relay action time delay, as well as TC and RTD linearization. The unit also supports password protection for security purposes and memory retention of all set up parameters, to permit common setup of additional transmitters for quick deployment.

As with all PCB® instrumentation, this equipment is complemented with toll-free applications assistance, 24-hour customer service, and is backed by a no-risk policy that guarantees satisfaction or your money refunded.
## Specifications

### Model 682A06

#### Performance

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#### Input Signal (Current)

- Programmable Ranges: -1 to +25 mA, 0 to +20 mA, -4 to +20 mA

#### Input Signal (Voltage)

- Programmable Ranges: -0.020 to +12 VDC, 0 to +1 VDC, +0.2 to +1 VDC, 0 to +5 VDC, +1 to +5 VDC, 0 to +10 VDC, +2 to +10 VDC

#### Input Signal (Linear Resistance)

- 0 to 10,000 ohm

#### Input Signal (Potentiometer)

- 10 to 100,000 ohm

#### Input Signal (Pt100 RTD) / Ni100 RTD)

- -328 to +1562 °F / -328 to +1562 °F
- -200 to +850 °C / -60 to +250 °C

#### Input Signal (Type K TC) [1]

- -292 to +2501 °F / -180 to 1372 °C

#### Output Signal (Current Range (span))

- Programmable Ranges: 0 to +20 mA, 0 to +20 mA, +20 to 0 mA, +4 to +20 mA, +20 to +4 mA

#### Output Signal (Voltage Range)

- Programmable Ranges: 0 to +10 VDC, 0 to +1 VDC, +1 to 0 VDC, +0.2 to +1 VDC, +1 to +0.2 VDC, 0 to +5 VDC, +5 to 0 VDC, +1 to +5 VDC, +5 to +1 VDC, +10 to 0 VDC, +2 to +10 VDC, +10 to +2 VDC

#### Output Relays (2 Provided)

- Form A type with 250 V rms, 2 amp AC or 1 amp DC capacity

#### Relay Function (Programmable)

- Setpoint, Window, Sensor Error, Power ON, Power OFF

#### Relay Time Delay (Programmable)

- 0 to 3600 sec

#### Relay Hysteresis (Programmable)

- 0.1 to 25 % of selected span

#### Display (Accessory Model 070A80)

- 4 digits

#### Environmental

- Temperature Range (Operating): -4 to +140 °F / -20 to +60 °C
- Humidity Range (Non-condensing): <95%
- Enclosure Rating (Housing / Terminals): IP50 / IP20

#### Electrical

- Power Required: 21.6 to 253 VAC, 50 to 60 Hz or +19.2 to +300 VDC
- Excitation Power (for Loop Powered Device): 16 to 20 VDC (0-20 mA)

#### Physical

- Mounting: DIN rail
- Size (approximate) (H x W x D) (With Attached 070A80 Display): 4.3 x 0.9 x 4.6 inch, 109 x 23.5 x 116 mm

#### Weight

- 170 gm (185 gm with Model 070A80)

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Notes: [1] Contact factory for details about other thermocouple types

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This product conforms to applicable European Directives for CE marking.

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ISO 9001:2000 CERTIFIED A2LA ACCREDITED to ISO 17025

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