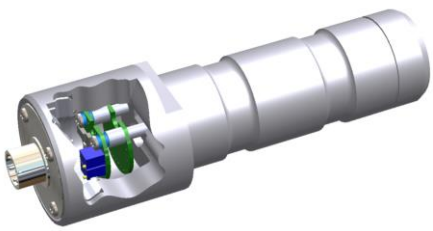
Analog 4 to 20 mA Strain Gage Module



Product Features & Benefits

- *Converts Bridge sensor output into 4 to 20 mA current loop.*
- *Eliminates the need for external signal conditioner and interconnections.*
- *Miniature package that fits into sensor body.*
- *Ideal for single or multiple sensor systems.*

Applications

- *Aerospace*
- *Industrial Weighing*
- *Marine*
- *Automotive*

Description

The Strainsert 2-wire Loop Powered 4 to 20 mA Strain Gage Modules are specially designed compact, high-performance strain gage analog signal conditioner modules. They are aimed at 350 Ohm sensor applications which require high measurement accuracy, resolution, and stability. The internal signal conditioner reduces interference in noisy environments and allows for longer cable runs. The module and sensor may be powered by a typical DC power supply. Outputs may be configured for either UniPolar or Bi-Polar operation.

The modules may be mounted inside of the Strainsert sensor body in either a single bridge, dual bridge, or bi-axial configuration.

Contact Strainsert Engineering for assistance with custom solutions, systems integration, or software development.

Specifications	Min	Typical	Max	Units
Current Loop Supply	7.5	24	36	Volts
Reverse Voltage Protection	-100			Volts
Operating Current	3	4 - 20	28	mA
Operating Temperature	-40		185	°F
Storage Temperature	-67		257	°F
Bridge Resistance		350		Ohms
Bridge Excitation	0.730	0.733	0.740	Volts
Bridge Sensitivity	0.5	2.0	6.0	mV/V
Bandwidth	0		235	Hz
Zero-Scale Temperature Stability			0.0100	%FS/°F
Full-Scale Temperature Stability			0.0150	%FS/°F
Electrical Isolation	10^10			Ohms at 50 VDC

Standard Cable Connections

Bridge 1		
Wire Color	Connector Pin	Description
Red	A	Power
Black	D	Return

Bridge 2 (optional)		
Wire Color	Connector Pin	Description
Green	B	Power
White	C	Return

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ORDERING EXAMPLE

Standard

CPA-2.5 (I) (SS) X

- X = Axial Connector
  W = Permanantly Attached Axial Cable
- Stainless Steel 17-4PH, H-1025 (Standard)
- I = 4 to 20 mA
- Nominal Pin Diameter, Dp (Inches)
- CPA-Pin Series Model Designation (CBA for Bolt Series)

ORDERING EXAMPLE

Custom

(CPI-FB) QXXXXX

- Custom Job Number
- FB = Full Bridge
  DFB = Dual Full Bridge
  BAFB = Bi-Axial Full Bridge
- CP = Clevis Pin
  CB = Clevis Bolt
  I = 4 to 20 mA