DIN Rail Mount Bridge Input Signal Conditioners

DRC-4710/4720





Bridge Input (Load Cell, Strain Gage) or Voltage Input

0 to 10 Vdc (DRC-4710) or 4 to 20 mA (DRC-4720) Output

Economical

The DRC-4710 and DRC-4720 DIN rail mount signal conditioners are self-contained DC powered modules designed for bridge input (load cell, strain gage) or voltage input (not connected to a bridge, excitation supply not used). These signal conditioners contain a precision instrumentation amplifier, filtered output and a built-in 10V excitation supply capable of driving a $350~\Omega$ bridge. The 0 to 30 mV input range makes the DRC-4710 and DRC-4720 compatible with most strain gage based load cell or pressure transducer outputs. Two models are available, one with 0 to 10 Vdc output (DRC-4710), and the other with 4 to 20 mA output (DRC-4720). Connections are made via easily accessible screw terminal blocks. Zero and Span adjustment potentiometers are located externally as well for easy access.

Specifications

Input Range: 0 to 10 mV, 0 to 20 mV, 0 to 30 mV

(dip switch selectable)

Power: 18 to 26 Vdc (350 Ω Bridge)

Linearity: ±0.01%

Zero Adjust: 20% max output

Temperature Coefficient: 0.05%/°C

Input Offset Voltage: ±70 μV

Input Offset Voltage Temperature Coefficient:

0.7 μV/°C

Common Mode Voltage: 0 to 5V

Common Mode Rejection (DC): 100 dB **Input Noise:** $0.3 \mu V$ pp typ (0.1 to 10 Hz)

OUTPUT

Output Range:

DRC-4710: 0 to 10 Vdc DRC-4720: 4 to 20 mA

Load Current (DRC-4710): 5 mA max Compliance Voltage (DRC-4720): 5.5V max

Loop Resistance (DRC-4720): 250 Ω max Frequency Response (2-Pole Filter): DC to 10 Hz Total RMS

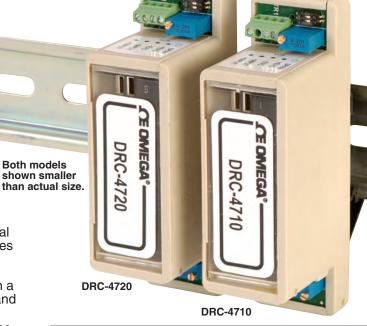
Gain Temperature Coefficient: 0.007%/°C

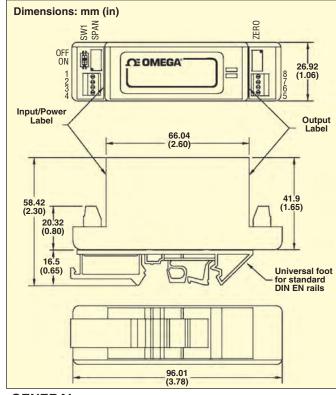
BRIDGE EXCITATION SUPPLY

Fixed Output: 10V ±1.0%

Temperature Coefficient: 0.05%/°C

Load Current: 30 mA max





GENERAL

Power: 18 to 26 Vdc

Input Current (One 350 Ω Bridge):

DRC-4710: 40 mA DRC-4720: 55 mA

Operating Ambient: 0 to 55°C (32 to 131°F) Storage Temperature: -40 to 80°C (-40 to 176°F)

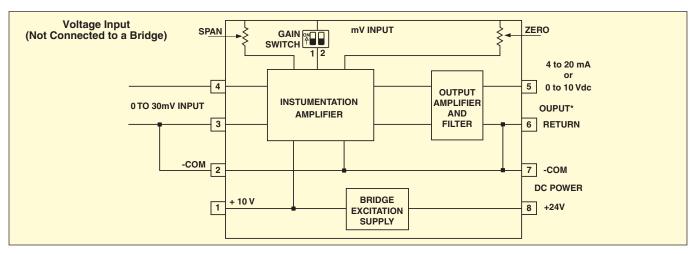
Dimensions: 96 H x 27 W x 42 mm D

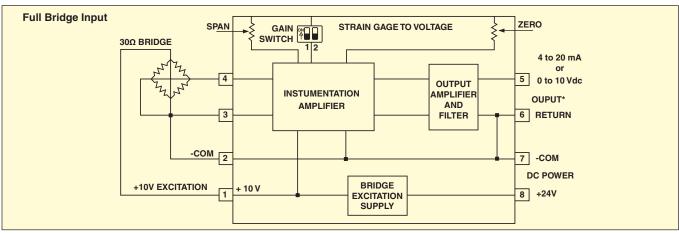
(3.78 x 1.06 x 1.65") Weight: 85 g (3 oz)

Detail of input/output connections for DRC-4720 shown actual size.









*DRC-4710 (0 to 10 Vdc output) DRC-4720 (4 to 20 mA output)

IN STOCK FOR FAST DELIVERY!

To Order Visit omega.com/drc4710_4720 for Pricing and Details	
Model No.	Description
DRC-4710	Bridge input signal conditioner with 0 to 10 Vdc output
DRC-4720	Bridge input signal conditioner with 4 to 20 mA

OMEGA DARIE Extended Warranty Program

OMEGACARE™ extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order.

Accessories

Model No.	Description
iDRN-PS-1000	Power supply (switching), 95 to 240 Vac Input, 24 Vdc output @ 850 mA
RAIL-35-2	35 mm (1.4") DIN rail, 2 m (6.6') length
RAIL-35-1	35 mm (1.4") DIN rail, 1 m (3.3') length

Comes complete with operator's manual.

Ordering Example: DRC-4710, bridge input signal conditioner with 0 to 10 Vdc output, iDRN-PS-1000 power supply, RAIL-35-2 mounting rail, and OMEGACARE 1-year extended warranty for DRC-4710.