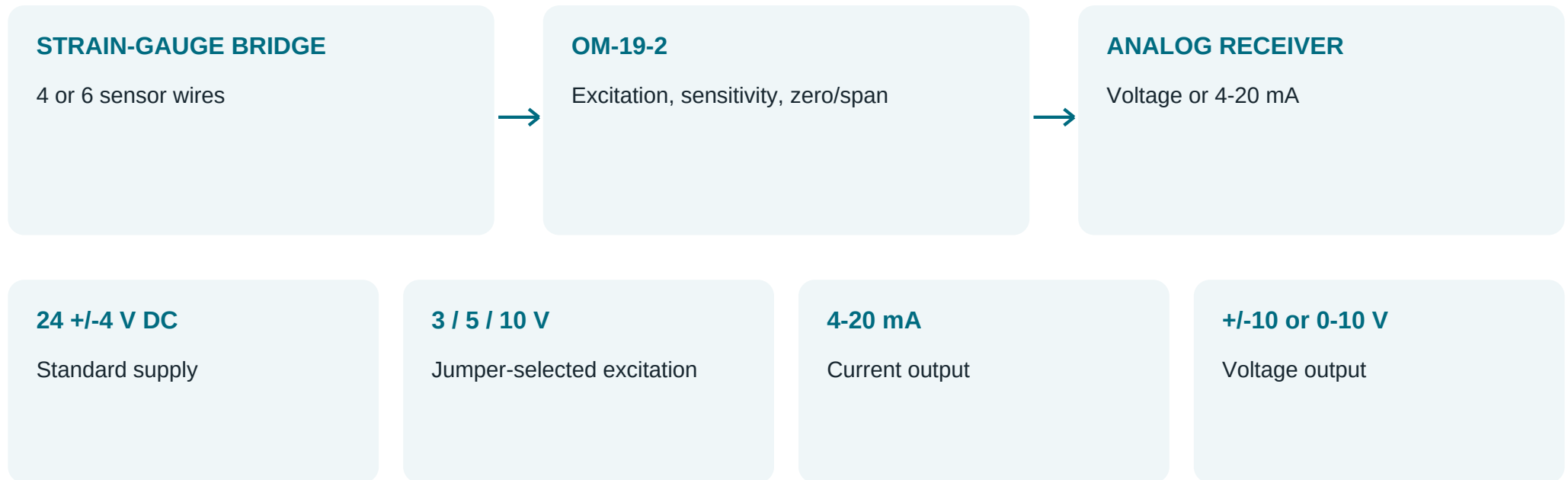


Load Cell Central OM-19-2

COMPLETE PRODUCT INFORMATION / SIGNAL CONDITIONER / ROLE AND VERSION

Load Cell Central OM-19-2 is the DIN-rail version of the OM-19 analog signal conditioner for strain-gauge load cells, with voltage and 4-20 mA outputs.



The load-cell bridge connects to the sensor input; the conditioned voltage or current signal connects to a receiver with the appropriate input impedance. Excitation and combined bridge impedance must be checked together.

VERSION BOUNDARY

OM-19-2 identifies DIN-rail construction. OM-192S identifies a separate set-point option, not a feature automatically included in the base model.

Load Cell Central OM-19-2

COMPLETE PRODUCT INFORMATION / INTERFACES AND OPERATING LIMITS

Standard supply	24 +/-4 V DC
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Maximum supply current	120 mA (OM-19)
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Sensor excitation	3, 5 or 10 V DC, jumper selected
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Minimum bridge impedance at 3/5 V	80 ohm
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Minimum bridge impedance at 10 V	160 ohm
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Span adjustment	0.15 to 12 mV/V
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Voltage output	+/-10 V or 0-10 V
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Current output	4-20 mA
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Voltage-output load	At least 2000 ohm
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Current-output load	At most 500 ohm
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Maximum output capacitance	1 nF
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SENSOR-SIDE LIMIT

At 3/5 V: minimum 80 ohm. At 10 V: minimum 160 ohm. Evaluate the combined impedance, not one cell in isolation.

RECEIVER-SIDE LIMIT

Voltage load ≥ 2000 ohm; current load ≤ 500 ohm. Keep output capacitance ≤ 1 nF.

Load Cell Central OM-19-2

COMPLETE PRODUCT INFORMATION / CONFIGURATION AND MEASUREMENT CHARACTERISTICS

Accuracy class	0.05%
Zero temperature effect	At most 0.035% FS per degree C
Span temperature effect	At most 0.02% per degree C
Operating temperature	0 to +70 C
Jumper-selected low-pass filter	10 Hz at -3 dB
Bandwidth	At most 20 kHz
Calibration control	Shunt-calibration push button

CONNECTION

Four-/six-wire selector plus sensor connection

EXCITATION

3, 5 or 10 V jumper; apply the bridge-load limit

CALIBRATION

Sensitivity selection, zero/span controls and shunt push button

FILTER SELECTION

The filter is jumper engaged, not permanently fixed. The selected low-pass point is 10 Hz at -3 dB; the bandwidth limit is ≤ 20 kHz.

Load Cell Central OM-19-2

COMPLETE PRODUCT INFORMATION / ENGINEERING DECISIONS

Bridge-signal conditioning

Converts strain-gauge load-cell signals into the supported voltage and current output formats.

Analog receiver interface

Connects to a voltage or current receiver while retaining its corresponding output-load limit.

Multiple load-cell acquisition

Supports up to four 350-ohm cells when the selected excitation and combined impedance remain within limits.

DIN-rail instrumentation

Uses the OM-19-2 DIN-rail construction rather than the board-only or housing variants.

Four cells at 10 V?

No: 87.5 ohm is below the 160-ohm minimum.

Two alarm relays?

Not standard: separate OM-192S option.

12 V with +/-10 V?

No: optional 12 V limits output to +/-5 or 0-5 V.

Filter always enabled?

No: jumper-based Y/N selection.

Load Cell Central OM-19-2

COMPLETE PRODUCT INFORMATION / SERVICE RECORD / SOURCES AND CONTACT

- 01 Put the connected measuring process into its approved maintenance state before wiring work.
- 02 Check the installed supply configuration before applying power: standard 24 +/-4 V DC is distinct from the 12 V option.
- 03 Match the four-/six-wire selector to the connected strain-gauge sensor.
- 04 Check the combined bridge impedance against the selected 3, 5 or 10 V excitation.
- 05 Match the receiving circuit to the voltage or 4-20 mA output and its load limit.
- 06 Record sensor sensitivity, zero/span settings and the filter-jumper position before changing them.
- 07 Do not assign OM-192S relay functions to a unit without the separate set-point option.
- 08 Verify the configured analog response and retain the final settings in the measurement record.

Manufacturer evidence

OM-19 / OM-192S Analog Signal Conditioner / Load Cell Central, copyright 2015; four-page datasheet

Pages 1, 3 and 4 support the exact DIN-rail version, controls and limits. The relay and 12 V options are identified separately.

Related measurement portfolio

Portfolio navigation only; no interchangeability or direct compatibility is implied.

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Load-cell tension measurement electronics / View product page

CONTACT APTER POWER

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



OM-19-2