

Digital Indicator AD-4531B

Digital Indicator for Strain Gauge Sensors



- Suitable for load, pressure, torque or tension measurement plus more
- Digital span calibration possible without using an actual load
- Zero correction value can be backed up
- Various output options available
- Performs A/D conversion at 100 times per second

AND
A&D Company, Limited
<http://www.aandd.jp>

...Clearly a Better Value

AD-4531B Digital Indicator for Strain Gauge Sensors

Specifications

Measurement points	1
Sensor type	Strain gauge sensor
Sensor power supply	5 V, up to 3 sensors of 350 Ω or 1 sensor of 120 Ω
Calibration method	Actual load calibration Digital span (actual load not required)
Measurement range	Zero adjustment range: -35 to +35 mV (-7 to +7 mV/V) Span adjustment range: -35 to +35 mV (-7 to +7 mV/V) Minimum guaranteed input sensitivity: 0.15 μV/d Minimum displayable input sensitivity: No limit
Maximum display	±999999
Linearity	0.005% F.S. within ±1 digit
A/D conversion	100 times per second
Temperature coefficient	Zero: ±0.1 μV/°C (typ.) Span: ±8 ppm/°C (typ.)
Panel area	Measurement display area: Red 7-segment 6-digit LED and minus display Character height 9.2mm 5 status indicators

General specifications

Power supply	AC 100 to 240V, 50/60HZ, 10VA approx. (Please prepare a power cable)
Unit mass	290 g
Temperature/humidity range for use	-10°C to +40°C, below 85% RH (no condensation)
External dimensions	96(W) × 48(H) × 127.5(D) mm
Panel cutout dimensions	92 × 45 mm

Standard accessories

Power supply connector (2-pin), load cell connector (7-pin), control input/output connector (6-pin), basic instruction manual (advanced instruction manual is available from A&D's homepage)

Various Functions

Comparator function	HI, OK or LO is displayed according to upper/lower limit settings One of AD4530-200 / 237 / 247 (optional) is required for output
Hold function	Choose from sample hold, peak hold, bottom hold, bipolar peak hold
Latch function	Holds display value, comparator (optional), analog output (optional), serial output (optional) corresponding to external latch input
Chattering prevention function	Hysteresis width and time can be set to reduce the load on the relay circuit
Power on zero function	Zero adjustment is possible when turning power on
Unit characters	Possible to choose the unit characters to be added to serial output (optional)

Options

AD4530-200 Relay output

HI, OK, LO contact output, AC 250 V or DC 30 V, 3A, mechanical contact, Contact arrangement: 1a, 4-pin connector attached

AD4530-030 RS485

Up to 31 units can be connected, 5-pin connector attached

AD4530-040 RS-232C input/output

5-pin connector attached

AD4530-007 D/A analog output

Temperature coefficient: 100 ppm/°C (typ.), 3-pin connector attached, Voltage output: 0 to 10 V, Current output: 4 to 20 mA, scaling is possible, Output resolution: 1/8000 approx. (13 bit equivalent)

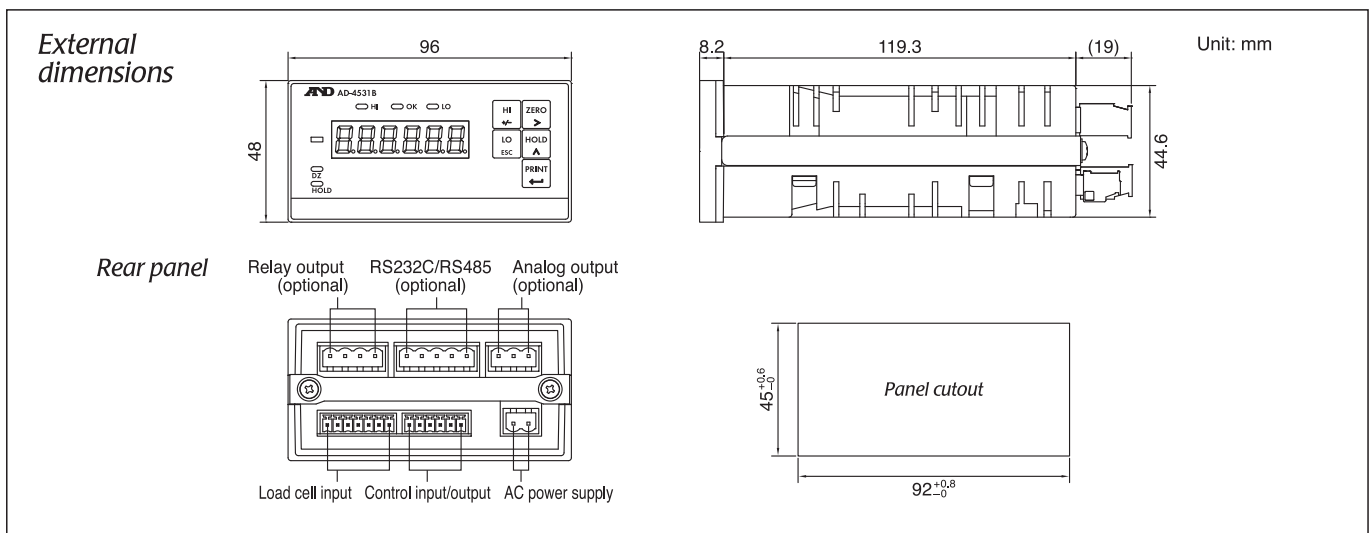
AD4530-237

Relay output, RS485, D/A analog output, 3, 4, 5-pin connectors attached

AD4530-247

Relay output, RS232C, D/A analog output, 3, 4, 5-pin connector attached

* The options above can only be used one at a time.



Appearance and/or specifications subject to change for improvement without notice.

A&D

...Clearly a Better Value

A&D Company, Limited

3-23-14 Higashi-Ikebukuro, Toshima-ku, Tokyo 170-0013 JAPAN
Telephone: [81] (3) 5391-6132 Fax: [81] (3) 5391-6148
http://www.aandd.jp

A&D Engineering, Inc.

1756 Automation Parkway, San Jose, CA 95131 U.S.A.
Telephone: [1] (408) 263-5333 Fax: [1] (408) 263-0119

A&D Australasia Pty Ltd.

32 Dew Street, Thebarton, South Australia 5031 AUSTRALIA
Telephone: [61] (8) 8301-8100 Fax: [61] (8) 8352-7409

A&D Instruments Ltd.

Unit 24/26 Blacklands Way Abingdon Business Park,
Abingdon, Oxon OX14 1DY UNITED KINGDOM
Telephone: [44] (1235) 550420 Fax: [44] (1235) 550485

German Sales Office

Hamburger Straße 30 D-22926 Ahrensburg, GERMANY
Telephone: [49] (0) 4102 459230 Fax: [49] (0) 4102 459231

A&D Korea Limited

Manhattan Bldg. 8F, 36-2 Yoido-dong, Youngdeungpo-gu,
Seoul, KOREA
Telephone: [82] (2) 780-4101 Fax: [82] (2) 782-4280

A&D RUS Co., Ltd.

Vereyskaya str.17, Moscow, 121357 RUSSIA,
Telephone: [7] (495) 937-33-44 Fax: [7] (495) 937-55-66

A&D Instruments India Private Limited

509 Udyog Vihar Phase V Gurgaon-122 016,
Haryana, INDIA
Telephone: [91] (124) 471-5555 Fax: [91] (124) 471-5599