Weighing Indicator

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Weighing Indicator

Analog Signal Conditioner

Digital Indicator

Printer & Equipment

AD-4328

Basic Weighing Indicator

The AD-4328 is a simple weighing indicator that converts and displays load cell outputs as weights.
The AD-4328 satisfies all basic requirements for platform, hopper and packer scales.

Display

- Large (character height 14.2mm) LED display for weights and tare values.
- Optional stand available
- Waterproof front panel (IP-65 compliant)

Weighing Functions

- Checkweighing mode (3 levels) for comparing weight with upper and lower limits.
- Setpoint comparison for batching applications
- Manual and automatic comparator and accumulated data storage to memory

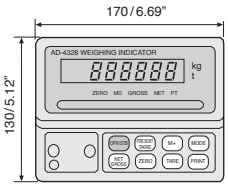
External I/O

- Control Inputs (3 standard)
- Current Loop Output (for connection to A&D peripheral devices)
- Optional Items
  RS-232C, RS-422/485, Relay output, Parallel BCD output

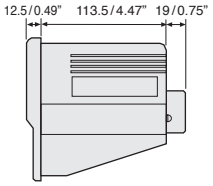
Digital Calibration Function

Power Supply

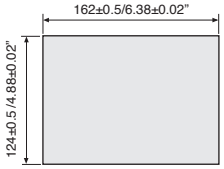
- DC9V (AC adapter or direct input to the terminal) AC adapter is optional



Front View



Side View



Panel Cutout

Unit: mm/inches

AD-4329A

Basic Weighing Indicator

The AD-4329A is equipped with a triple-range function and is ideal for scales with multiple weighing intervals.
The AD-4329A is perfect for a diverse array of applications such as hoppers, packers and check-weighing scales.

Dual Range/Triple Range

- Can switch between three ranges by setting combinations of capacity and minimum display.

Display

- Vacuum Fluorescent Display (VFD) with 13mm characters

Weighing Functions

- Checkweighing mode (3 levels) for comparing weight with upper and lower limits.
- Setpoint comparison for batching applications
- Manual and automatic comparator and accumulated data storage to memory

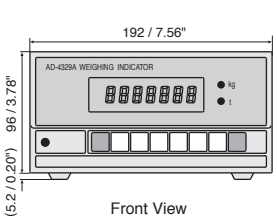
External I/O

- 7 Control Input nodes
- Standard interface RS-232C,
  20mA Current Loop (for use with A&D peripheral devices)
- Optional Items
  RS-422/485, Relay Output, Parallel BCD Output, Analog Output (4-20mA)

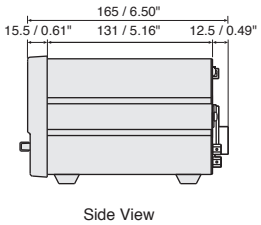
Digital Calibration Function

Power Supply

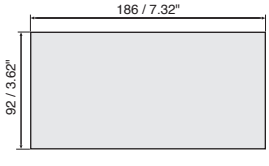
- AC100/120/200/220/240V (Please request preferred voltage rating at time of order)



Front View



Side View



Cut Out

Unit: mm/inches

AD-4401A

Basic Weighing Indicator

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

The AD-4401A has a compact body, high-end A/D converter and versatile functions, including batch-weighing control and check weighing. The AD-4401A is suitable for a wide range of applications, from hopper and packer scales to check-weighing scales.

As a new feature the AD-4401A now is equipped with a High Performance Digital Filter (HPDF). In situations where vibration must be removed, it provides high accuracy as well as high-speed response.

The AD-4401A is highly compatibility with the old AD-4401 model allowing for easy replacement of any old AD-4401 devices.

Easily replaceable

- The size, color and methods of operation and control panel installation of the AD-4401A remains the same as the AD-4401.
- Interface connectors retain compatibility so even when updating from AD-4401 to AD-4401A previously connected devices can continue to be used without changing any connectors.
- Functions have been added but the default settings remain identical to the AD-4401.

Display

- 13mm high characters for the main display and 7mm high characters for the sub display.
- The front panel is structured to be waterproof (IP-65 compliant).

Weighing Functions

- Pre-programmed with normal-batching and loss-in-weight sequences
- Batch-time/Discharge-time monitoring, Supplementary flow function
- Check-weighing mode (5 levels)

External I/O

- Standard, Configurable Control I/O: Input 6, Output 8
- Standard 20mA Current Loop (for use with A&D peripheral devices)
- Optional Items RS-232C, RS-422/485, Parallel BCD Output, Analog Output (4-20mA)

Digital Calibration Function

Power Supply

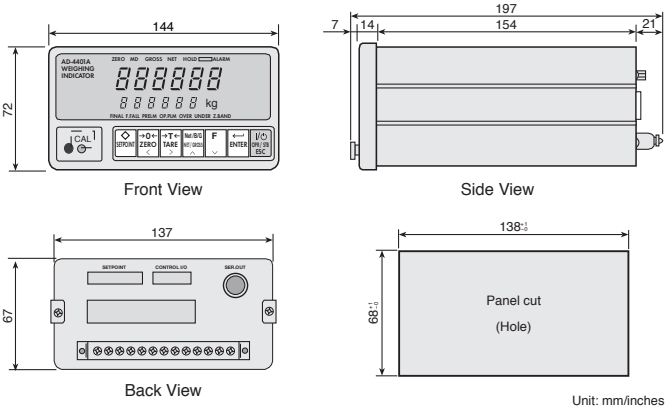
- AC100 to 240V

New Fuction

- HPDF (High Performance Digital Filter)
- Modbus-RTU (required option RS-422/485)

Capable of Modbus-RTU Communications

Eliminate vibrations with new HPDF function



Unit: mm/inches

AD-4402

Multifunction Weighing Indicator with Field Bus Support

The AD-4402 combines a small body with a large display and excellent weighing sequence functions. The AD-4402 can be used with various factory devices with its support for field bus (CC-Link, DeviceNet, PROFIBUS), Modbus, serial, parallel, analog output and relay output.

Display

- Large Vacuum Fluorescent Display (VFD) with 18mm characters on main display
- Sub display shows weight, raw material, setpoint, cumulative value, code name, and error message, etc. on the same screen.
- Waterproof front panel (IP-65 compliant)

Weighing Functions

- Preprogrammed with normal-batching and loss-in-weight sequences
- Batch-time/discharge-time monitoring and supplementary flow function
- Mixing function - one unit can mix multiple materials
- Sequence functions for filling and mixing
- High-speed sampling at 100 times/sec enables swift response to weight changes
- Memory function
- Stores 100 data values of both raw materials and recipe codes

External I/O

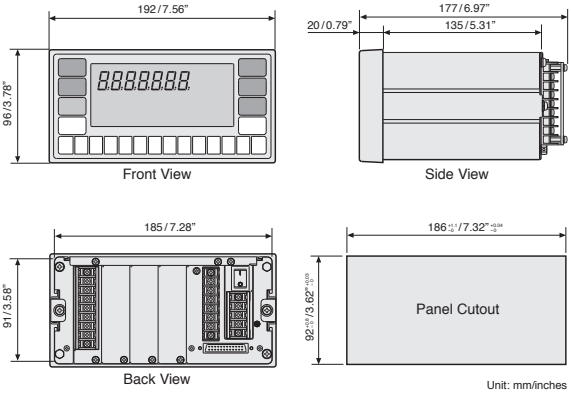
- Configurable Control I/O: 11 Input nodes, 11 Output nodes
- Standard RS-485, Current Loop Output (for connection to A&D peripheral devices)
- Modbus-RTU
- Optional Items
  RS-232C, RS-422/485, Relay Output, Parallel BCD Output, Analog Output (4-20mA)
- Field bus
  Can connect to CC-Link, DeviceNet, PROFIBUS (optional)

Digital Calibration Function

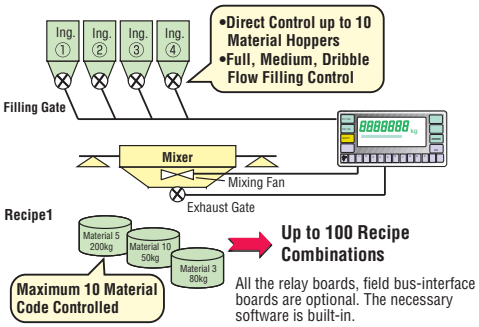
Supports all power sources

- AC100 to 240V
  (switching-mode power supply)
  DC 24V model also available (AD-4402D)

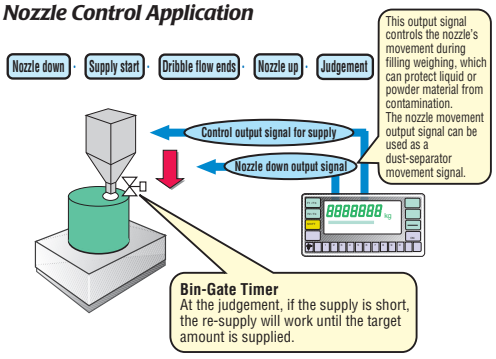
Capable of Modbus-RTU Communications



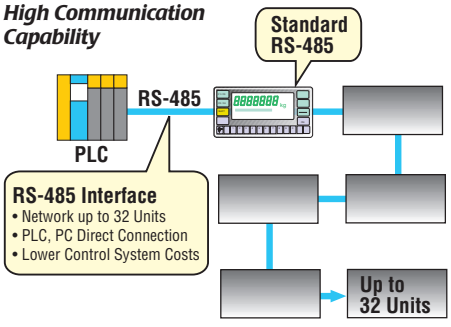
Mixing System Control by AD-4402



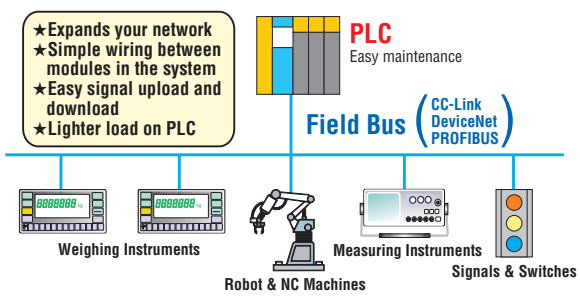
Nozzle Control Application



High Communication Capability



Field Bus Network



AD-4403-FP

Flameproof Weighing Indicator

The AD-4403FP is a flameproof weighing indicator (ExdIIBT5X) and has passed explosion testing by the Technology Institution of Industrial Safety in Japan. It is ideal for use in dangerous environments with materials such as LPG, paints and petroleum based materials.

Display

- Equipped with main and sub displays
- The main display shows weights and the sub display show settings and accumulated weight.

Weighing Functions

- Preprogrammed with normal-batching and loss-in-weight sequences
- Automatic accumulation of net weight on batch finish
- High-speed sampling at 100 times/sec enables swift response to weight changes

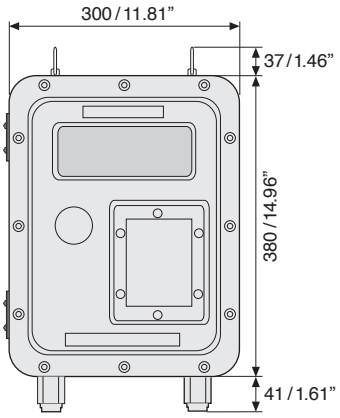
External I/O

- Control I/O 6 Input nodes, 6 Output nodes
- Current Loop Output (for connection to A&D peripheral devices)

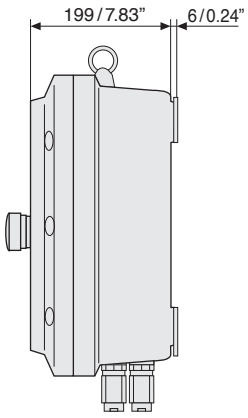
Digital Calibration Function

Power Supply

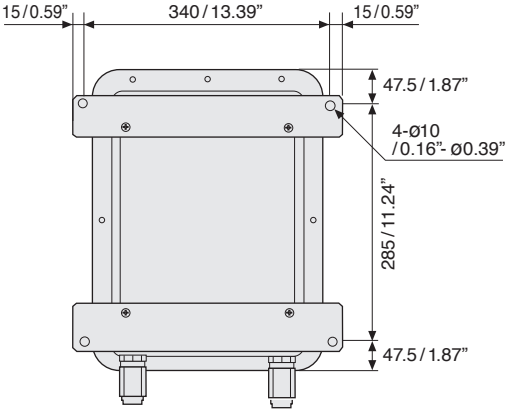
- AC100/120/200/220/230/240V
  (Please request preferred voltage rating at time of order)



Front View



Side View



Back View

Unit: mm/inches

AD-4404

Check Weighing Indicator

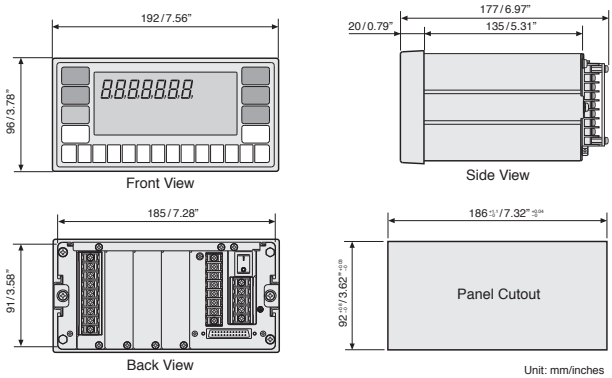
The AD-4404 is ideal for check weighing on conveyers, rollers, and platform scales.
Simply connect a load cell or a platform scale to the AD-4404 and you can easily make an excellent check scale.

Large Display

- Large Vacuum Fluorescent Display (VFD) with 18mm characters on main display
- Sub display shows the product name, setpoint, graph, etc.
- Waterproof front panel (IP-65 compliant)

Weighing Functions

- Checks weight of an object moving on a conveyer and outputs the comparator judgment
- Checks weight while packing on the conveyer and outputs the comparator judgment
- Bar graph indicates where the weight falls within the OK range
- Stores and recalls up to 100 sets of preset items by individual code number
- High-speed sampling at 100 times/sec enables swift response to weight changes



External I/O

- Control I/O: 11 Input nodes, 11 Output nodes
- Standard RS-485 I/O, Current Loop Output (for connection to A&D peripheral devices)
- Optional Items
  RS-232C, RS-422/485, Relay Output, Parallel BCD Output, Analog Output (4-20mA)

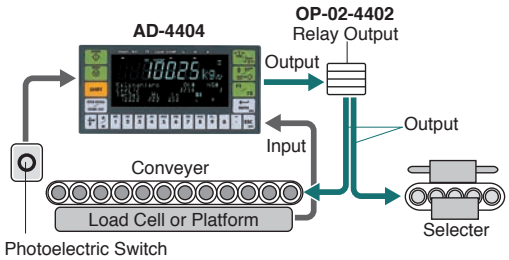
Digital Calibration Function

Power Supply

- AC100 to 240V

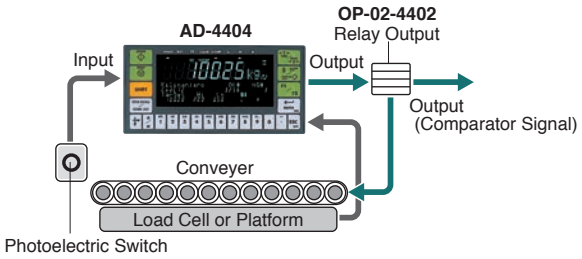
Check Mode

Simply connect the AD-4404 to a weighing device (conveyer) to make an excellent check scale.
The AD-4404 is equipped with convenient check modes and functions to improve productivity and precision.



●***Fully Automatic (1):***
Always in motion.
Automatic reject.

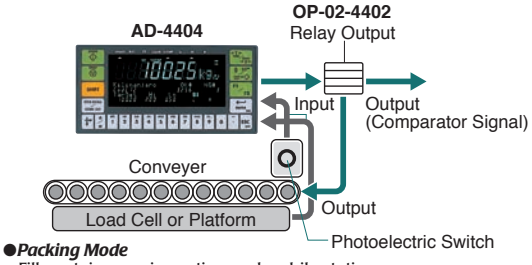
●***Simple Check Weigher***
In-motion only.
Records total packages and total acceptable packages.



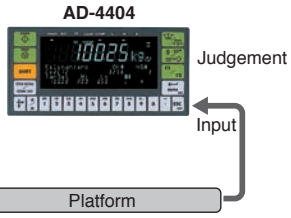
●***Semi-Automatic (1):***
Stops conveyer when item is out of acceptable range.

●***Fully Automatic (2):***
Conveyor stops during weighing for high accuracy.
Automatic restart.
Automatic reject.

●***Semi-Automatic (2):***
Conveyor stops during weighing for higher accuracy.
Conveyor stops and buzzer sounds for items out of acceptable range.



●***Packing Mode***
Fill container on in-motion scale while stationary.
Press start button when complete.
If container is within acceptable range, conveyors starts.



●***Hi/OK/Lo***
Set the acceptable weight range and set the buzzer function to your Hi/OK/Lo requirements.

AD-4405A

Weighing Indicator
with Optional Built-in Printer

The AD-4405A features a built-in optional printer. Functions include check-weighing, normal batch-weighing, and counting. The AD-4405A can be installed on a console panel using the optional panel mount kit.

Large Display

- Large Vacuum Fluorescent Display (VFD) with 20mm characters

Weighing Functions

- Multiple weighing intervals (dual range)
- Check-weighing function (5 levels)
- Set-point comparison for batching applications (normal-batching/loss-in-weight)
- Displays or outputs cumulative weight values, the number of accumulations, etc.
- Simple counting function
- Memory function
  Stores four sets of setpoints, preset tare and unit weight

External I/O

- Standard RS-232C
- Optional Items
  RS-232C, RS-422/485, Analog Output (4-20mA), Current Loop Output, Relay Output, Control input

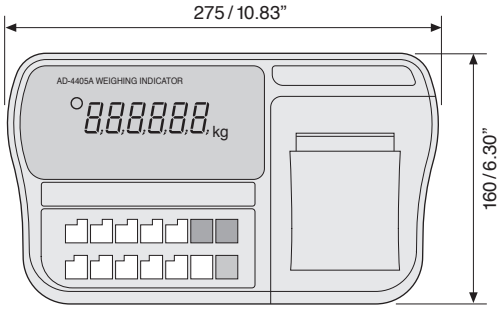
Optional Printer

- 16 characters per line with the dot matrix compact printer
- Weight, tare, cumulative values, code numbers, data and time can be printed out
- Selectable printing formats with UFC

Digital Calibration Function

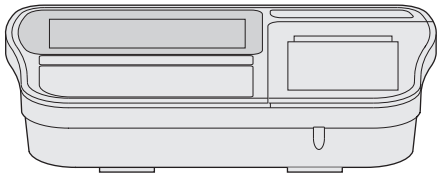
Power Supply

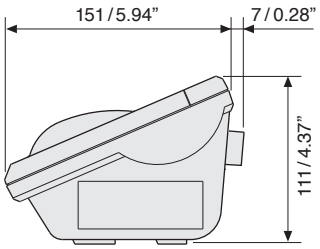
- AC100/120/200/230V



Front View

With Optional Built-in Printer





Side View

Unit: mm/inches

AD-4406A

Static Weighing Indicator

The AD-4406 is small, light (650g) and easy to use. The AD-4406 is equipped with a 25mm LCD and battery operation is possible.

With optional satnd

Display

- Large Liquid Crystal Display (LCD) with 25mm high characters

Weighing Functions

- Multiple weighing intervals (dual range)
- Check-weighing function (5 levels)
- Displays or outputs cumulative weight values, the number of accumulations, etc.
- Memory function
  Stores four sets of setpoints to memory.

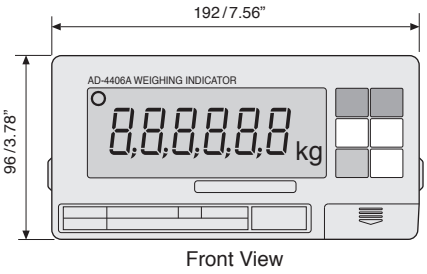
External I/O

- Optional Items
  RS-232C, RS-422/485, Relay Output, Control Input, Analog Output (4-20mA), Current Loop Output, Stand

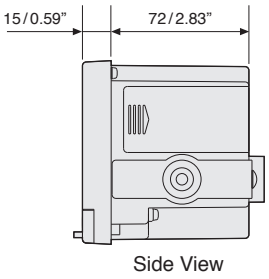
Digital Calibration Function

Power Supply

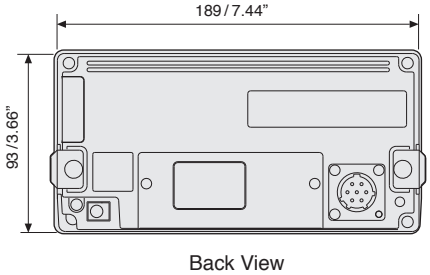
- Optional AC adapter or alkaline C type battery 6PCS
  Battery life 180 hours (Load Cell 350Ω × 1)
  Battery life 70 hours (Load Cell 350Ω × 4)



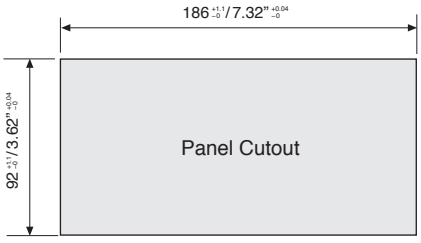
Front View



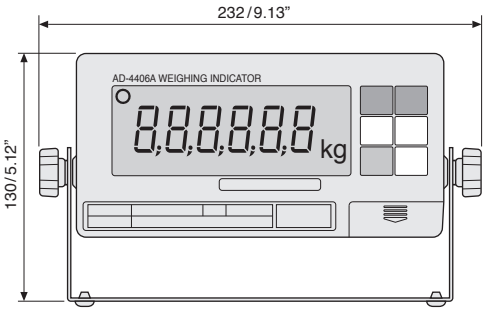
Side View



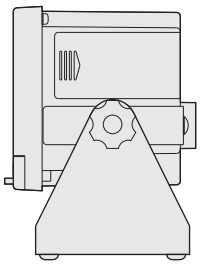
Back View



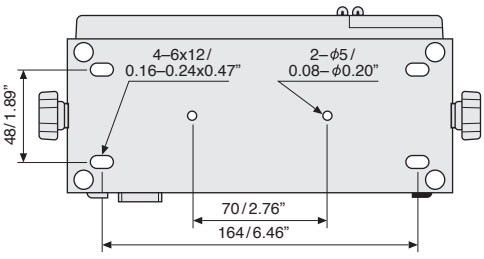
(With optional stand)



Front View



Side View



Unit: mm/inches

AD-4407A

Waterproof Weighing Indicator

IP 65 compliant, dust and waterproof weighing indicator. The stainless steel (SUS304) body and stand are easy to clean in water.

With Standard Stand

Large Display

- Large Vacuum Fluorescent Display (VFD) with 20mm characters

Weighing Functions

- Multiple weighing intervals (dual range)
- Checkweighing function (5 levels)
- Setpoint comparison for batching applications (normal-batching/loss in weight)
- Displays or outputs cumulative weight values, the number of accumulations, etc.
- Simple counting function
- Memory function
  Stores four sets of setpoints, preset tare and unit weight

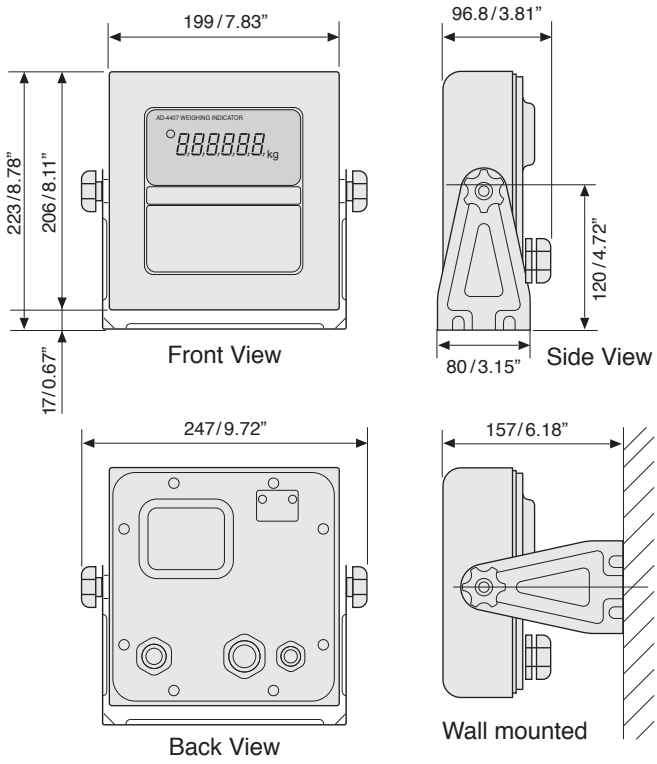
External I/O

- Standard RS-232C, Stand
- Optional Items
  RS-232C, RS-422/485, Relay Output, Control Input, Analog Output (4-20mA), Current Loop Output
- Current Loop Output (for connection to A&D peripheral devices)

Digital Calibration Function

Power Supply

- AC100/120/200/230V



Unit: mm/inches

AD-4408A

Weighing Indicator
with Field Network Support

AD-4408A accomplishes the difficult goal of measuring with high precision and quick response times in environments with frequent vibrations thanks to its newly developed high performance digital filter.
Various field network modules can be installed

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

Display

- Weighing Display Green LED 14.6mm characters
- Status Display Red LED
- Polarity Display Green LED
- Dust and water-proof display (when mounted to a panel)

Weighing Functions

- High speed sampling 100 times/second

External I/O

- Current Loop Output (for connection to A&D peripheral devices)

Digital Calibration Function

Power Supply

- AC100 to 240V

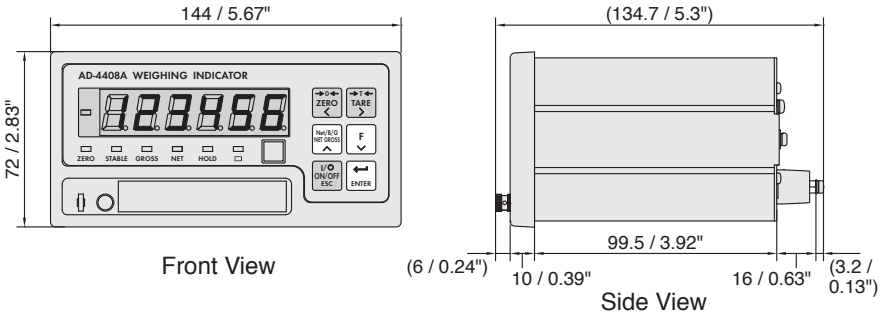
Optional Items (Field Network Modules)

*For module installation a TORX Screwdriver is required. Use TORX size T9.

AX-ABCC-PROFI Profibus Module

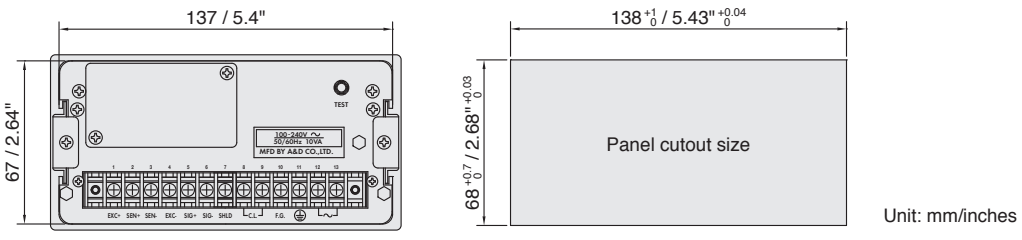
AX-ABCC-MODBUS Modbus Module

AX-ABCC-DEVICE DeviceNet Module



Front View

Side View



Back View

Unit: mm/inches

AD-4408C

Weighing Indicator Designed for CC-Link

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

CC-Link

Precise weighing is often required in weighing environments with heavy vibrations. This means that electricity, software and mechanical vibration countermeasures such as analog filters, moving averages, oil dampers etc. are required.
However these countermeasures are linked to slowing the response time of the weighing instrument so it is difficult to make a weighing instrument that combines high precision with quick response time.
AD-4408C accomplishes this difficult goal of measuring with high precision and quick response time in environments with frequent vibrations thanks to its newly developed high performance digital filter.
This addition makes it possible to affordably improve the efficiency of weighing instruments including sources of structural vibration such as automatic weight separator, CFW etc. Cost performance and maintainability increase because no specific mechanical vibration-proof structure is needed.
Generally calibration in places with vibrations requires vibration sources to be completely stopped or is done on holidays when no machines are operating. However the AD-4408C can be calibrated even in these environments.
The AD-4408C comes equipped with a CC-Link interface and one master device can connect to up to 42 devices (only AD-4408C).

Display

- Weighing Display Green LED 14.6mm characters
- Status Display Red LED
- Polarity Display Green LED
- Dust and water-proof display (when mounted to a panel)

Weighing Functions

- High speed sampling 100 times/second
- Internal Resolution approx. 16,000,000
- Zero correction, tare, gross/net weight switching

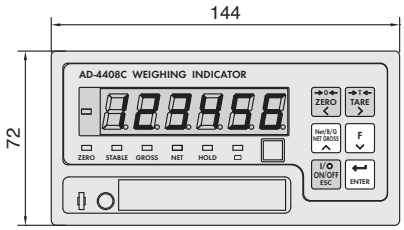
External I/O

- CC-Link
- Current Loop Output (for connecting external display devices, printers, etc. from A&D)

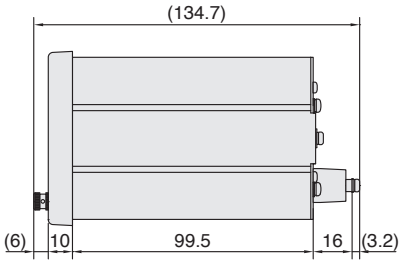
Digital Calibration Function

Power Supply

- AC100 to 240V

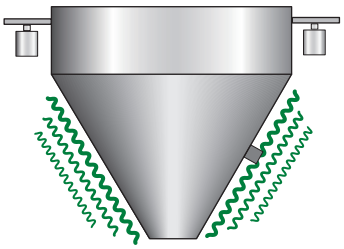


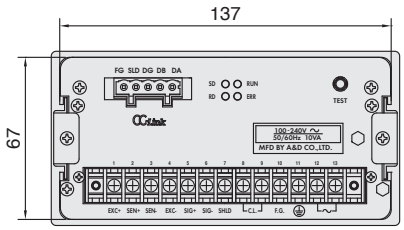
Front View



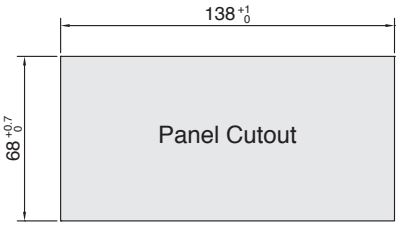
Side View

● *Weighing while inducing vibration*



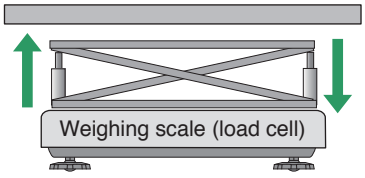


Back View



Unit: mm

● *Weighing while raising and lowering*



AD-4410

Vibration-Resistant Weighing Indicator

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

The high performance digital filter protects against vibration and allows for high precision and quick response time. The AD-4410 can greatly cut down the need for mechanical vibration countermeasures which can greatly reduce costs and maintenance.
With the AD-4410 it is no longer difficult to weigh while inducing vibration.
There is only one setting for the high performance digital filter. This allows the AD-4410 can find the optimal value to cancel out vibration with minimal setting changes.
In addition to the high performance digital filter the AD-4410 has the following features: averaging hold, comparator, high-order linearity compensation, near-zero detection, zero tracking and gravitational acceleration compensation. The AD-4410 also comes standard with a RS-232C interface for data transfer and 3 Control input and output nodes.

Display

- Weighing Display Green LED 14.6mm characters
- Status Display Red LED
- Polarity Display Green LED
- Dust and water-proof display (when mounted into a panel)

Weighing Functions

- High speed sampling 100 times/second
- Internal Resolution approx. 16,000,000
- Zero correction, tare, gross/net weight switching

Capable of Modbus-RTU Communications

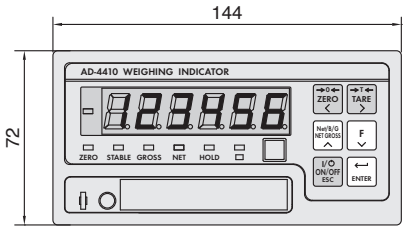
External I/O

- Standard RS-232C (D-Sub9P Male)
- Standard Current Loop Output (for connecting external display devices, printers, etc. from A&D)
- Standard Control I/O: 3 Input nodes (No-voltage contact or open collector), 3 Output nodes (open collector)
- Optional Items
  RS-485, RS-232C(CH2), Analog Output(4-20mA), Stand

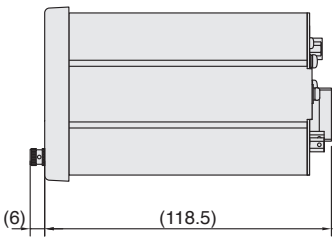
Digital Calibration Function

Power Supply

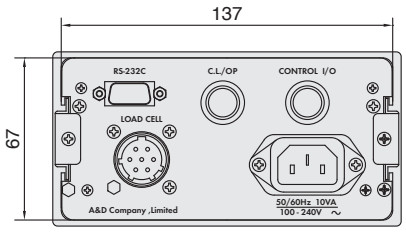
- AC100 to 240V



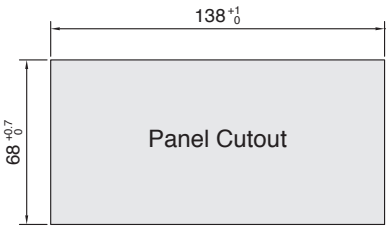
Front View



Side View

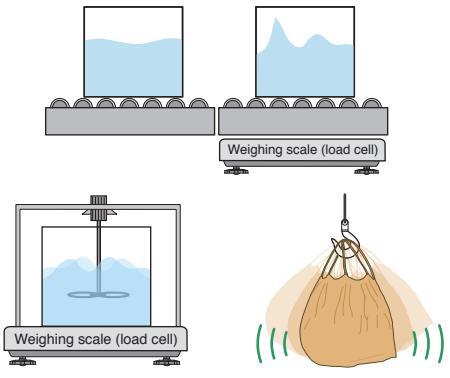


Back View

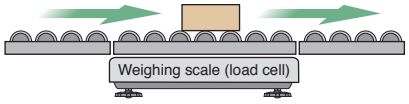


Unit: mm

● *With the averaging hold you can find the weight when measuring is difficult such as when liquids are moving and while mixing.*



● *You can make a simple checkweigher by combining the high performance digital filter and peak hold functions.*



AD-4430B

Ultra Compact Weighing Module

DIN rail mount ideal for insertion into control box
High sampling frequency (1000 times per second)
High speed BCD output (1000 times per second)

The AD-4430B is an ultra-compact weighing module equipped with our newly developed high performance digital filter for use in environments with heavy vibrations. The AD-4430B has a sampling rate of 1000 times per second and can be inserted into a control panel via DIN rail. BCD I/O is a standard feature and can output at 1000 times per second.
When connected to a load cell the AD-4430B can check for disconnections or incorrect wiring making it convenient for installation and start-up or periodic inspections.
In addition to the high performance digital filter the AD-4430B has the following features: averaging hold, comparator, high-order linearity compensation, near-zero detection, zero tracking and gravity acceleration correction.

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

Display

- Measurement Display 5.3mm characters Red LED
- Status Display Red LED
- Polarity Display Red LED

Weighing Functions

- High sampling rate 1000 times/sec
- Internal resolution approx. 16,000,000
- Zero correction, tare, gross/net weight switching

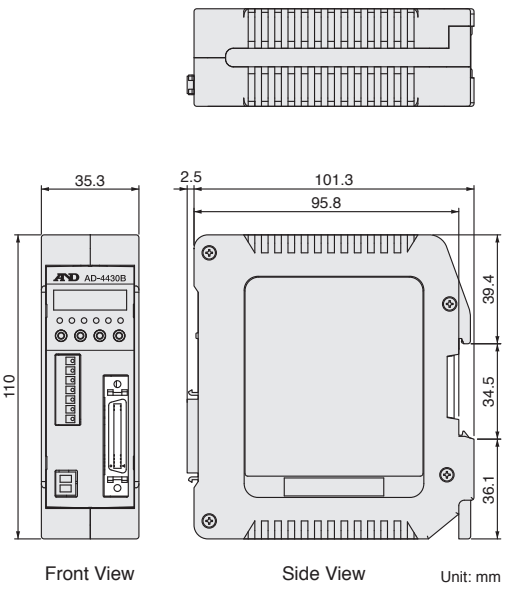
External I/O

- BCD I/O (open collector)

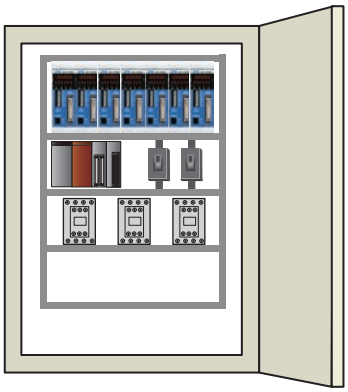
Digital Calibration Function

Power Supply

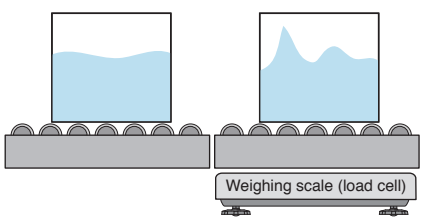
- DC24V



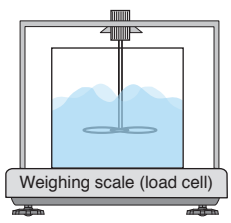
● *Can be inserted into a control box*



● *Weighing moving liquids*



● *Weighing while mixing*



AD-4430C

Ultra Compact Weighing Module

The AD-4430C is an ultra-compact weighing module equipped with high performance digital filter for use in environments with heavy vibrations.

The AD-4430C has a sampling rate of 1000 times per second and can be inserted into a control panel via DIN rail.

Eliminates the effect of vibrations

HPDF High Performance Digital Filter

CC-Link

Display

- Measurement Display 5.3mm characters Red LED
- Status Display Red LED
- Polarity Display Red LED

Weighing Functions

- High sampling rate 1000 times/sec
- Internal resolution approx. 16,000,000
- Zero correction, tare, gross/net weight switching

External I/O

- CC-Link (1 Master with total of 42 devices possible)
- Control I/O: 6 input points, 8 output points
- Selectable functionality for input and output ports
- Current loop output 20mA current loop signal (passive)
- USB: USB2.0 compatible Micro USB connector
  Not subject to CE compliance standards during USB interface use

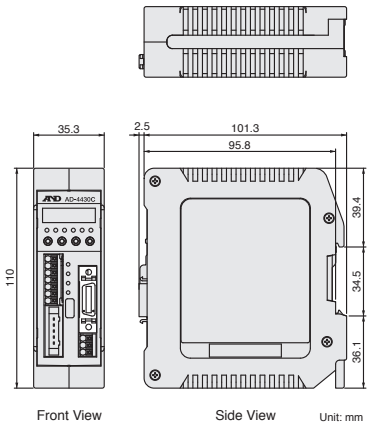
Digital Calibration Function

Power Supply

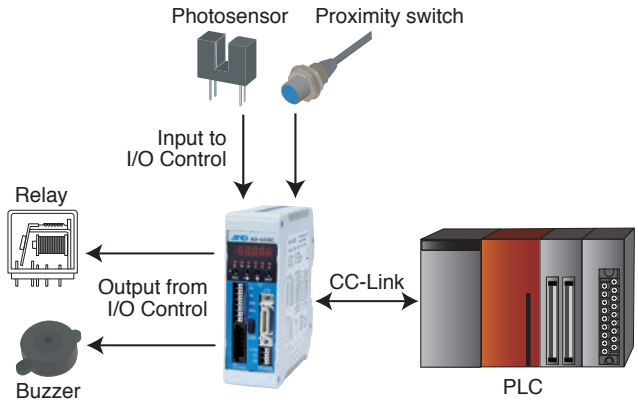
- DC24V

Features

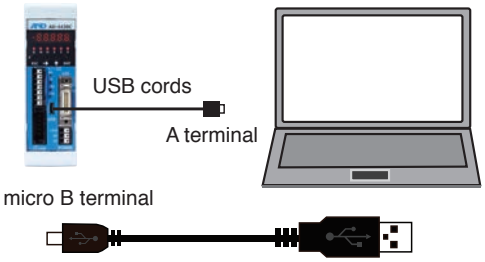
- Dual Digital Filter
- Sequential Weighing (Filling/dispensing measurements)
- Input/output control can allocated to any user input/output
- Setpoint
- Active free fall compensation
- Gravity acceleration correction
- Comparator functionality
- Hold functions
- Load cell connection diagnosis
- Near zero detection
- Zero tracking
- Power-on zero
- Flow rate (per second) display/output



● *Control I/O (6 Inputs, 8 Outputs) Can Be Used As Remote I/O*



● *USB (Micro-B) Interface*



AD-4541-V/I

Ultra-Slim Analog Signal Conditioner

Converts signals received from a bridge type sensor such as a load cell, pressure sensor, strain gauge, etc. to a voltage output (AD-4541-V/–2V to +2V) or a current output (AD-4541-I/4-20mA).
The AD-4541-V/I can be easily mounted on a DIN rail or a wall.

Input

- Strain gauge excitation: DC 5V
- Frequency response: DC to 2Hz (–3dB)

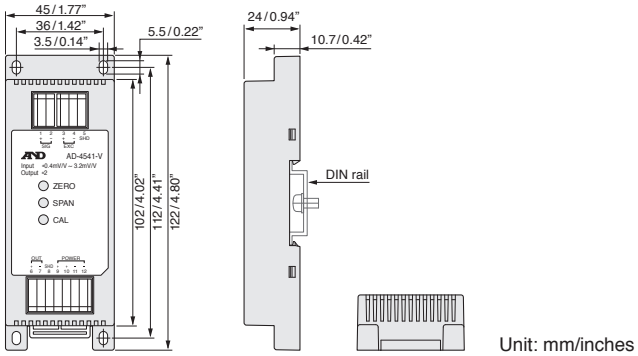
Output

- Voltage Output (AD-4541-V): –2V to +2V
- Voltage Current (AD-4541-I): 4-20mA

Housing to be fixed on a DIN rail or a wall

Power Supply

- DC24V



AD-4530

Digital Indicator for Strain Gauge Sensors

The AD-4530 converts voltage signals from a strain gauge to a digital display. It is ideal for measuring weight, pressure, torque etc.
Can back up zero compensation values.

A/D Conversion Speed 10times/second

Compact (96 × 48mm)

Display

- 4 digit 14mm characters Red LED, 5 status display marks

Functions

- Various hold functions, comparator, latch function, chattering prevention function, power-on zero

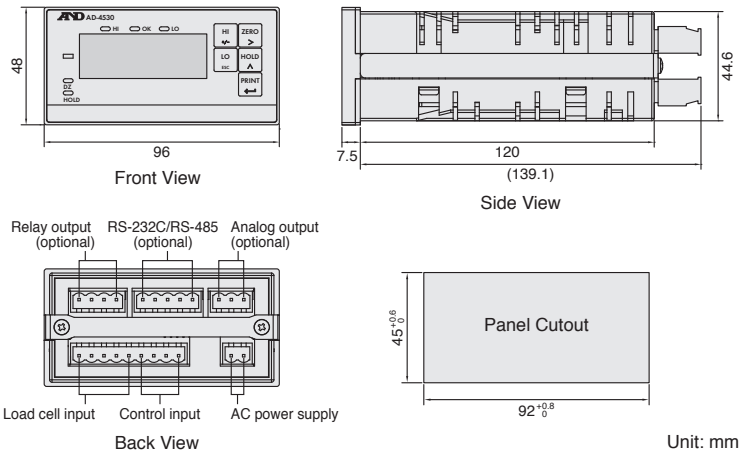
External I/O

- Control Input Latch, Hold, Zero
- Relay Output (optional)
- RS-232C (optional)
- RS-485 (optional)
- D/A Analog Output (optional)

Digital Calibration Function

Power Supply

- AC100 to 240V



AD-4531B

Digital Indicator for Strain Gauge Sensors

The AD-4531B converts voltage signals from a strain gauge to a digital display. It is ideal for measurements such as weight, pressure, torque and tension.
Zero correction back up possible.

A/D Conversion Speed 100 times/second

Compact (96 × 48mm)

Display

- 6 digit red LED with 9.2mm characters, minus display and five status display marks.

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)

External I/O

- Control I/O

Options

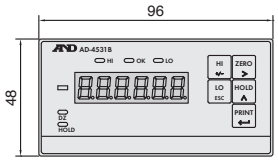
- AD4530-200 Relay output
  HI, OK, LO contact output, AC250V or DC30V, 3A, mechanical contact,
  Contact arrangement: 1a, 4-pin connector attached
- AD4530-030 RS-485
  Up to 31 units can be connected, 5-pin connector attached
- AD4530-040 RS-232C input/output
  5-pin connector attached
- AD4530-007 D/A analog output
  Temperature coefficient: 100 ppm/°C (typ.), 3-pin connector attached,
  Voltage output: 0 to 10V, Current output: 4 to 20mA, scaling is possible,
  Output resolution: 1/8000 approx. (13 bit equivalent)
- AD4530-237
  Relay output, RS-485, D/A analog output, 3, 4, 5-pin connectors attached
- AD4530-247
  Relay output, RS-232C, D/A analog output, 3, 4, 5-pin connector attached

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

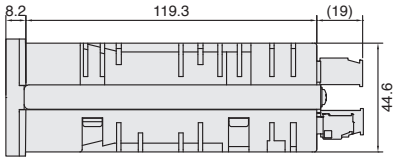
Digital Calibration Function

Power Supply

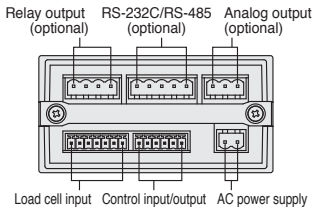
- AC100 to 240V



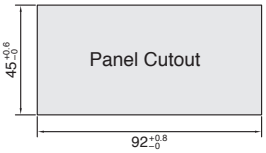
Front View



Side View



Back View



Unit: mm

AD-4532B

Digital Indicator for Strain Gauge Sensors

The AD-4532B converts voltage signals from a strain gauge at high speeds to a digital display. High-speed A/D conversion (2000 times/second) is ideal for measuring the dynamic phenomena of loads, pressure, displacement, torque, etc.

A/D Conversion Speed 2000 times/second

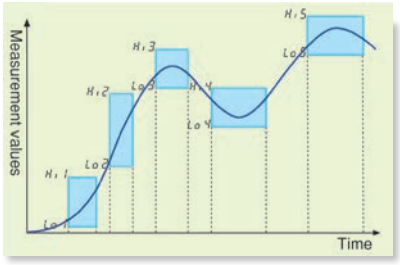
Compact (96 × 96mm)

Display

- Measurement Display: 6 digit 14mm characters
  Tricolor (orange, green, red) LED
- Upper/Lower Limit Display: 5 digit 9 mm characters Green LED
- Judgment Display: Tricolor (orange, green, red) LED
  HI, OK, LO display

Functions

- 2D (5-level) comparator function
  This function determines the acceptability of the total result by performing sequential movement and comparison of five different upper/lower limits through timing on the axis or an external input (trigger).
  It is ideal for use in measurements such as a press-in operation which requires changes in the setpoint as time elapses. The five comparators can also be used individually.



- Digital hold and peak hold functions
- Upper/lower limits are stored in the internal memory
- Simultaneously displays and outputs the HI/OK/LO judgment to the contact signal

External I/O

- ±10V Analog Output, 3-point Comparator Output, Modbus-RTU (Analog maximum output resolution 1/10000)
- Optional Items
  RS-232C, Parallel BCD Output,
  Analog Voltage/Current Output (±10V and 4-20mA), Ethernet

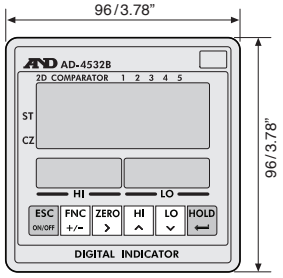
Digital Calibration Function

Power Supply

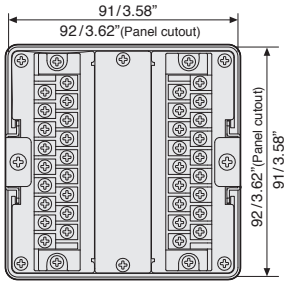
- AC100 to 240V

Capable of Modbus-RTU Communications

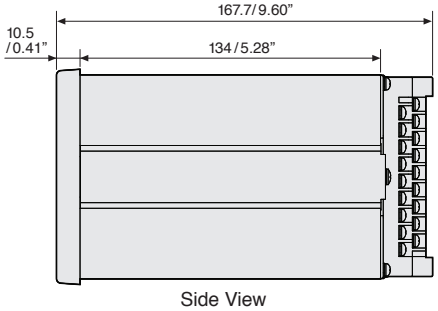
Digital Calibration Function



Front View



Back View



Side View

Unit: mm/inches

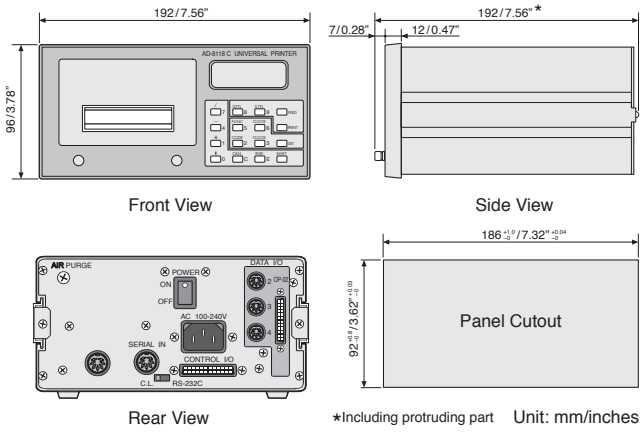
AD-8118C

Universal Printer

The AD-8118C is a universal printer designed for connection with indicators, scales and electronic balances.

Features

- Date and time printing function (built-in calendar/clock)
- Cumulative memory function
  (Memory stored even if the power supply is switched off.)
- Internal battery provides calendar/clock and cumulative memory function back-up for approx. 10 years.
- Cumulative/statistical calculation functions by code/ input channel
- Print modes: Random, Dump, Interval, and Batch
- Print format modification function using the operation keys (in the random print mode)
- Connectable to external displays (up to 3 devices) with a current loop output (channel 1 only)
- Up to 4 data output devices including indicators (AD-8118C-02 required) can be connected to a single AD-8118C printer.
- Receives input signal via a current loop (maximum length of approx. 100m) or RS-232C (maximum length of approx. 15m)
- Automatic paper winder (AD-8118C-10) is available as option.
  Physical dimensions: 192(W)×120(H)×193.5(D)mm
  (including protruding part)



AD-8121B

Compact Printer

The AD-8212B prints charts and offers a full range of statistical functions.

Features

- Chart selectable to show change in weight, interval time, start time and stop time
- A full range of statistical functions: weight, total weight, counting, total counting, number of operations, standard deviation, coefficient of variant, chart, year, month, date, hour, minute and second
- AC power supply and battery operation permits use anywhere.
- Accepts RS-232C and current loop input from A&D's electronic balances, scales and indicators.

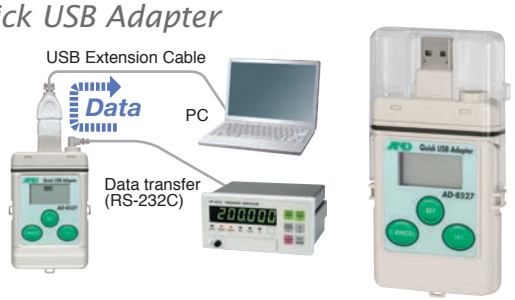
AD-1688

Weighing Data Logger

Stores approximately 5000 weights with times stamps
Can transfer saved data to PC via USB port
(Transfer software unnecessary)

AD-8527

Quick USB Adapter



Transfer weighing data in real time to a PC
Simple data transfer to Excel and Word
(Transfer software unnecessary)

Weighing Indicator

Model	AD-4328	AD-4329A	AD-4401A
Input sensitivity	0.2μV/D (min)	0.15μV/D (min)	0.3μV/D (min)
Zero adjustment range	−1mV to 5mV	−35mV to 35mV	0mV to 20mV
Load cell excitation	DC5V±5%, 90mA Remote sensing function included Up to 6 load cells (350Ω) can be connected	DC5V±5%, 120mA Remote sensing function included Up to 8 load cells (350Ω) can be connected	DC10V±5%, 230mA Remote sensing function included Up to 8 load cells (350Ω) can be connected
Temperature coefficient	Zero: ±0.2μV/°C Typ. Span: ±8ppm/°C Typ.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±(0.2μV+0.0008% of Dead Load)/°C Typ. Span: ±0.0008%/°C Typ.
Non-linearity	0.01% of F.S.	0.005% of F.S.	0.01% of F.S.
Maximum measurement voltage	15mV	35mV	32mV
A/D conversion method	Integrating dual-slope type	Delta Sigma Method	Delta Sigma Method
Internal resolution	40000	Approx. 16,000,000	Approx. 1,000,000
Maximum display resolution	10000d	10000d	999999d
Sampling rate	10 times/sec	10 times/sec	100 times/sec
Display	Main display: Red LED 7 digit 7-segment, Character height 14.2mm Gross weight, net, tare preset, cumulative value Status Display: Red LED Circle display marks (5) Unit Display: Red LED Display units (kg, t)	Main display: Cobalt blue VFD 7 digit 7-segment display, character height 13mm Gross weight, net weight, tare preset Status Display: Cobalt blue VFD Triangle display marks (6) Unit Display: Green LED Display units (kg, t)	Main display: Cobalt blue VFD 7 digit 7-segment display, character height 13mm Gross weight, net weight Sub Display: 8 digit 7-segment display with 7mm characters Status Display: Upper 7 marks Under 7 marks Unit Display: Display units (g, kg, t)
Standard external I/O	Standard serial output Current Loop Output (for connection to A&D peripheral devices) Control Input (Contact input) 3 points (selectable)	Standard interface RS-232C, 20mA Current Loop (for use with A&D peripheral devices) Control Input (Contact input) 7 points (selectable) Standard RS-232C	Control I/O: Input 6, Output 8 20mA Current Loop (for use with A&D peripheral devices) Setpoint For Digital Switch and AD-4401-06 (setpoint unit) connection
Power	DC9V Approx. 3VA (AC adapter or DC input to the terminal)	AC100/120/200/220/240V request voltage Approx. 30VA	AC100 to 240V without switching Approx. 30VA
Operating temperature	−5°C to 40°C	−10°C to 40°C	−10°C to 40°C
Operating humidity	Below 85%RH (no condensation)	Below 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	170(W) × 130(H) × 145(D) mm	192(W) × 96(H) × 165(D) mm	144(W) × 72(H) × 197(D) mm
Options	OP-01 Parallel BCD Output (Open collector) OP-02 Comparator Output (Open collector) OP-03 RS-422/485 + Relay output (AC adapter included) OP-04 RS-232C + Current Loop + Relay OutputOP-10 Stand *Only one option can be selected from OP01-04* *by RS-422 / 485 switching*	OP-01 Parallel BCD Output (Open collector) OP-02 Comparator Output (Relay output) OP-03 RS-422/485 OP-07 Analog Output (4-20mA) *Only one option can be selected from OP-01,03,04,07* *depending on RS-442/485*	OP-01 Parallel BCD Output (Open collector) OP-03 RS-422/485 OP-04 RS-232C OP-06 Setpoint unit OP-07 Analog Output (4-20mA) OP-10 Stainless steel side panel *Only one option can be selected from OP-01,03,04*

Model	AD-4402	AD-4403-FP	AD-4404
Input sensitivity	0.3μV/D (min)	0.3μV/D (min)	0.3μV/D (min)
Zero adjustment range	0mV to 20mV	0mV to 20mV	0mV to 20mV
Load cell excitation	DC10V±5%, 230mA Remote sensing function included Up to 8 load cells (350Ω) can be connected	DC10V±5%, 120mA Remote sensing function included Up to 4 load cells (350Ω) can be connected	DC10V±5%, 230mA Remote sensing function included Up to 8 load cells (350Ω) can be connected
Temperature coefficient	Zero: ±0.2μV/°C Typ. Span: ±8ppm/°C Typ.	Zero: ±0.2μV/°C Typ. Span: ±8ppm/°C Typ.	Zero: ±0.2μV/°C Typ. Span: ±8ppm/°C Typ.
Non-linearity	0.01% of F.S.	0.01% of F.S.	0.01% of F.S.
Maximum measurement voltage	32mV	32mV	32mV
A/D conversion method	Delta Sigma Method	Delta Sigma Method	Delta Sigma Method
Internal resolution	Approx. 1,000,000	Approx. 1,000,000	Approx. 1,000,000
Maximum display resolution	16000d	10000d	16000d
Sampling rate	100 times/sec	100 times/sec	100 times/sec
Display	Main display: Green VFD 7 digit 7-segment display, Character height 18mm Net/gross weight switching Display units (g, kg, t) Sub display: Green VFD 7-segment / 5 × 7 dot, Character height 5mm Code name, setting values, cumulative value, and others Various messages, bar graph Status display: Green VFD 5 × 7 dot Triangle display marks (8), Symbols (10)	Main display: Cobalt blue VFD 7 digit 7-segment, Character height 13mm Sub display: Cobalt blue VFD 8 digit 7-segment display, Character height 7mm Status Display: 2 LEDs Rectangle display marks (14) Judgment Display: 3 LEDs	Main display: Green VFD 7 digit 7-segment, Character height 18mm Weight Sub display: Green VFD 7-segment / 5 × 7 dot, Character height 5mm Code number, setpoint, error display, etc. Status display: Triangle display marks (8), 5 × 7 dot symbols (10)
Standard external I/O	Control I/O 11 selectable function inputs (no-voltage contact or open collector) 11 selectable function outputs (open collector output) Standard RS-485 (Modbus-RTU compliant), Current Loop Output (for connection to A&D peripheral devices)	Control I/O 6 selectable inputs (no-voltage contact or open collector) 6 selectable outputs (Relay contact output) Contact Capacity: DC24V or AC250V 0.5A Standard serial output Current Loop Output (for connection to A&D peripheral devices) Code Input 2 Conduit Fittings For cable diameter(ø) 10 to 12mm (G1/2)	Control I/O 11 selectable inputs (no-voltage contact or open collector) 11 selectable outputs (open collector output) Standard RS-485, Current Loop Output (for connection to A&D peripheral devices)
Power	AC100 to 240V (50/60Hz) Approx. 30VA DC24V (AD-4402D)	AC100, 110, 120, 200, 220, 230, 240V(50/60Hz) Approx. 60VA	AC100 to 240V (50/60Hz) Approx. 30VA
Operating temperature	−5°C to 40°C	−5°C to 40°C	−5°C to 40°C
Operating humidity	Below 85%RH (no condensation)	45 to 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	192(W) × 96(H) × 177(D) mm	300(W) × 380(H) × 199(D) mm	192(W) × 96(H) × 177(D) mm
Options	OP-01 Parallel BCD Output (Open collector) OP-02 Relay output OP-03 RS-422/485 OP-04 RS-232C OP-05 Parallel I/O OP-07 Analog Output (4-20mA) OP-20 CC-Link Interface OP-21 DeviceNet Interface OP-22 PROFIBUS Interface *Up to 3 options can be used simultaneously.*	OP-03 RS-422/485 OP-04 RS-232C OP-07 Analog Output (4-20mA) OP-10 Conduit fittings for cable diameter(ø) 6-8mm (G1/2) OP-11 Conduit fittings for cable diameter(ø) 8-10mm (G1/2) OP-12 Conduit fittings for cable diameter(ø) 10-12mm (G1/2) OP-13 Conduit fittings for cable diameter(ø) 12-14mm (G1/2) OP-14 Conduit fittings for cable diameter(ø) 14-16mm (G1/2) *Conduit fitting diameters are in mm, screw diameter is inside the parentheses ( ).*	AD4402-01 Parallel BCD Output (Open collector) AD4402-02 Relay Output AD4402-03 RS-442/485 AD4402-04 RS-232C AD4402-05 Parallel I/O AD4402-07 Analog Output (4-20mA) AD4402-25 Indicator Stand

Model	AD-4405A	AD-4406A	AD-4407A
Input sensitivity	0.15μV/D (min)	0.15μV/D (min)	0.15μV/D (min)
Zero adjustment range	−35mV to 35mV	−35mV to 35mV	−35mV to 35mV
Load cell excitation	DC5V±5%, 60mA Remote sensing function included Up to 4 load cells (350Ω) can be connected	DC5V±5%, 60mA Remote sensing function included Up to 4 load cells (350Ω) can be connected	DC5V±5%, 120mA Remote sensing function included Up to 8 load cells (350Ω) can be connected
Temperature coefficient	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.
Non-linearity	0.005% of F.S.	0.005% of F.S.	0.005% of F.S.
Maximum measurement voltage	35mV	35mV	35mV
A/D conversion method	Delta Sigma Method	Delta Sigma Method	Delta Sigma Method
Internal resolution	Approx. 16,000,000	Approx. 16,000,000	Approx. 16,000,000
Maximum display resolution	20,000 (permissible 40,000)	20,000 (permissible 40,000)	20,000 (permissible 40,000)
Sampling rate	Approx. 10 times/sec	Approx. 10 times/sec	Approx. 10 times/sec
Display	Main display: Cobalt blue VFD 6 digit 7-segment, Character height 20mm Weight, quantity, setpoint, cumulative value, tare value, code contents units (g, kg, t, pcs, %) Judgment Display: HI, OK, LO (Red, green LEDs) Status Display: Stable, Net, Zero, PT, READY, M+ Triangle display marks (3)	Main display: LCD 6 digit 7-segment, Character height 25mm Weight, setpoint, cumulative value, code contents units (g, kg, t, %) Judgment Display: HI, OK, LO (Shows on part of main display) Status Display: Stable, Net, Zero, READY, BATT, M+ Triangle display marks (3)	Main display: Cobalt blue VFD 6 digit 7-segment, Character height 20mm Weight, quantity, setpoint, cumulative value, tare value, code contents Units (g, kg, t, pcs, %) Judgment Display: HI, OK, LO (Red, green LEDs) Status Display: Stable, Net, Zero, PT, READY, M+ Triangle display marks (3)
Standard external I/O	Standard RS-232C	———	Standard RS-232C
Power	AC100/120/200/230V request voltage Approx. 20VA	7 to 10V DC AC adapter or 6 alkaline C type batteries Approx.10VA	AC100/120/200/230V request voltage Approx. 20VA
Operating temperature	−10°C to 40°C	−10°C to 40°C	−10°C to 40°C
Operating humidity	Below 85%RH (no condensation)	Below 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	275(W) × 111(H) × 158(D) mm	192(W) × 96(H) × 87(D) mm	246.2(W) × 223(H) × 96.8(D) mm
Options	OP-03 RS-422/485 + Relay output OP-05 RS-232C + Relay + Control Input OP-07 Analog Output (4-20mA) OP-08 RS-232C + Relay + Control Input + Current Loop Output OP-10 Panel Mount Kit OP-12 Display Stand *(Options 03 and 07 come with AC adapter)* *Only one of 03, 05, 07, 08 can be selected*	OP-03 RS-422/485 + Relay Output OP-04 RS-232C OP-05 RS-232C + Relay + Control Input OP-07 Analog Output (4-20mA) OP-08 RS-232C + Relay + Control Input + Current Loop Output OP-11 Stand (Compatible with other options *(Options 03 and 07 come with AC adapter)* *Only one option can be selected from OP-03, 04, 05, 07, 08*	OP-03 RS-422/485 + Relay output OP-05 RS-232C + Relay + Control Input OP-07 Analog Output (4-20mA) OP-08 RS-232C + Relay + Control Input + Current Loop Output *Only one can be selected*

Model	AD-4408A	AD-4408C	AD-4410
Input sensitivity	0.15μV/D (min)	0.15μV/D (min)	Below 0.15μV/D (min)
Zero adjustment range	−35mV to 35mV	−35mV to 35mV	−35mV to 35mV
Load cell excitation	DC5V±5%, 120mA Remote sensing function included Up to 8 load cells (350Ω) can be connected	DC5V±5%, 120mA Remote sensing function included Up to 8 load cells (350Ω) can be connected	DC5V±5%, 120mA Remote sensing function included Up to 8 load cells (350Ω) can be connected
Temperature coefficient	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.
Non-linearity	0.005% of F.S.	0.005% of F.S.	0.005% of F.S.
Maximum measurement voltage	35mV	35mV	35mV
A/D conversion method	Delta Sigma Method	Delta Sigma Method	Delta Sigma Method
Internal resolution	Approx. 16,000,000	Approx. 16,000,000	Approx. 16,000,000
Maximum display resolution	999999d	999999d	999999d
Sampling rate	100 times/sec	100 times/sec	100 times/sec
Display	Main display: Green LED 6 digit 7-segment, character height 14.6mm Status Display: Red LED Rectangle display marks (6) Units Unit stickers (g, kg, t)	Main display: Green LED 6 digit 7-segment, character height 14.6mm Status Display: Red LED Rectangle display marks (6) Units Unit stickers (g, kg, t)	Main display: Green LED 6 digit 7-segment, character height 14.6mm Net weight or gross weight (switching) Status Display: Red LED Rectangle display marks (6) Zero, stable, gross weight, net, hold, selectable function in operation Units Unit stickers (g, kg, t)
Standard external I/O	Standard serial output Current Loop Output (for connection to A&D peripheral devices)	CC-Link I/O When only AD-4408C is used 1 master device can connect up to 42 devices through switching the number of stations occupied. Standard serial output Current Loop Output (for connection to A&D peripheral devices)	Standard RS-232C (ch1) Standard serial output (ch2) Current Loop Output (for connection to A&D peripheral devices) Control I/O 3 selectable function inputs (no-voltage contact or open collector) 3 selectable function outputs (open collector output)
Power	AC100 to 240V (50/60Hz) Approx. 10VA	AC100 to 240V (50/60Hz) Approx. 10VA	AC100 to 240V (50/60Hz) Approx. 10VA
Operating temperature	−10°C to 40°C	−10°C to 40°C	−10°C to 40°C
Operating humidity	Below 85%RH (no condensation)	Below 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	144(W) × 72(H) × 135(D) mm (Includes protrusions)	144(W) × 72(H) × 135(D) mm (Includes protrusions)	144(W) × 72(H) × 125(D) mm (Includes protrusions)
Options	External I/O (sold separately) AX-ABCC-PROFI PROFIBUS Module AX-ABCC-MODBUS Modbus-RTU Module AX-ABCC-DEVICE DeviceNet Module	———	OP-03 RS-485(installed to ch2) DIN Connector OP-04 RS-232C (installed to ch2) DIN Connector OP-07 Analog Output (4-20mA) OP-11 Stand *Only one of OP-03,04 can be selected.* *Upon installation current loop cannot be used.*

Weighing Indicator

Model	AD-4430B	AD-4430C
Input sensitivity	0.15μV/D (min)	0.15μV/D (min)
Zero adjustment range	−35mV to 35mV	−35mV to 35mV
Load cell excitation	DC5V±5%, 60mA Remote sensing function included Up to 4 load cells (350Ω) can be connected	DC5V±5%, 60mA Remote sensing function included Up to 4 load cells (350Ω) can be connected
Temperature coefficient	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.	Zero: ±0.02μV/°C Typ., ±0.1μV/°C Max. Span: ±3ppm/°C Typ., ±15ppm/°C Max.
Non-linearity	0.005% of F.S.	0.005% of F.S.
Maximum measurement voltage	35mV	35mV
A/D conversion method	Delta Sigma Method	Delta Sigma Method
Internal resolution	Approx. 16,000,000	Approx. 16,000,000
Maximum display resolution	99999d	99999d
Sampling rate	1000 times/sec	1000 times/sec
Display	Main display: Red LED 5 digit 7-segment, Character height 5.3mm Net weight or gross weight (switching) Status Display: 6 Red LEDs Gross weight, net, hold, stable, zero, selectable function in operation	Main display: Red LED 5 digit 7-segment, Character height 5.3mm Net weight or gross weight (switching) Status Display: 6 Red LEDs Gross weight, net, hold, stable, zero, selectable function in operation
Standard external I/O	BCD I/O (open collector) Device Connector: IEEE1284 Half pitch (MDR) 36P female	CC-Link (1 Master with total of 42 devices possible) Control I/O 6 input points, 8 output points Current loop output 20mA current loop signal (passive) USB2.0 compatible Micro USB connector *Not subject to CE compliance standards during USB interface use*
Power	DC24V Approx. 6W	DC24V Approx. 6W
Operating temperature	−10°C to 50°C	−10°C to 50°C
Operating humidity	Below 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	35(W) × 110(H) × 101(D) mm	35(W) × 110(H) × 101(D) mm
Options	—	—

Analog Signal Conditioner

Model		AD-4541-V/I
Internal	Input range	±3.2mV/V
	Zero adjustment range	±0.5mV/V
	Span adjustment range	0.4mV/V to 3.2mV/V
	Non-linearity	0.05% of F.S. typ.
	Load cell excitation	DC5V 60mA max. (One 120Ω load cell or up to 4 350Ω load cells can be used)
	Zero temperature coefficient	2μV/°C Typ.
	Span temperature coefficient	200ppm/°C Typ.
	Frequency response	DC - Approx. 2Hz (−3dB)
	Response time	Approx 190 ms (0% to 90%)
	Input noise	2μVp-p typ (0.1 to 10Hz)
	Calibration standard	1mV/V ±0.2% typ.
External	Voltage output (AD-4541-V)	±2V (Load 2kΩ or higher)
	Current output (AD-4541-I)	4-20mA (Load 250Ω or lower)
Power	Voltage	DC24V
	Current	100mA max (Approx. 2.4W)
General	Operating temperature	−5°C to 50°C
	Operating humidity	Below 85%RH (no condensation)
	Storage temperature	−20°C to 70°C
	External dimensions	45(W) × 122(H) × 24(D) mm
	Weight	Approx. 90g
Other	Terminal	Spring clamp type Wire 0.08 to 1.5mm² (AWG 28-14) Maximum Outside Diameter ø3.4mm
	Installation	DIN rail or screw
	Material (body)	PBT (V0 fireproof, glass fiber filled black)
	Isolation	Input/output - power supply
	Insulation Resistance	DV 500V for 1 min
	Accessories	Flathead screwdriver × 1, Instruction manual × 1

Digital Indicator

Model	AD-4530	AD-4531B	AD-4532B
Input sensitivity	0.4μV/D (min)	0.15μV/D (min)	0.6μV/D (min)
Zero adjustment range	−35mV to 35mV	−35mV to 35mV	Span value ± 50%
Load cell excitation	DC5V Up to 3 350Ω sensors can be connected Only one 120Ωsensor can be connected	DC5V Remote sensing function included Up to 3 350Ω sensors can be connected Only one 120Ωsensor can be connected	DC5V, DC2.5V (function switching) Remote sensing function Up to 4 350Ω sensors or 1 120Ω sensor can be connected at DC5V Up to 8 350Ω sensors or 2 120Ω sensors can be connected at DC2.5V
Temperature coefficient	Zero: ±0.2μV/°C Typ. Span: ±30ppm/°C Typ.	Zero: ±0.1μV/°C Typ. Span: ±8ppm/°C Typ.	Zero: ±0.5μV/°C Typ. Span: ±30ppm/°C Typ.
Non-linearity	0.01% of F.S.±1d	0.005% of F.S.	0.02% of F.S.±1d
Maximum measurement voltage	35mV	35mV	15mV (5V excitation), 7.5mV (2.5V excitation)
A/D conversion method	Delta Sigma Method	Delta Sigma Method	Delta Sigma Method
Internal resolution	Approx. 1,000,000	Approx. 16,000,000	Approx. 1,600,000
Maximum display resolution	9999d	999999d	999999d
Sampling rate	10 times/sec	100 times/sec	2000 times/sec
Display	Main display: Red LED 4 digit 7-segment, Character height 9.2mm Measurement value, upper/lower limits Polarity display: Red LED Judgment Display: 3 LEDs (Orange, green, red) Status Display: 2 LEDs (Green, Orange) Triangle display marks (3)	Main display: Red LED 6 digit 7-segment, Character height 9.2mm Measurement value, upper/lower limits Polarity display: Red LED Judgment Display: 3 LEDs (Orange, green, red) Status Display: 2 LEDs (Green, Orange)	Main display: Tricolor LED (Orange, green, red) 6 digit 7-segment, Character height 14mm Measurement value Upper/lower limit display: Green LED 5 digits, Character height 9mm Polarity display: Tricolor LED (Orange, green, red) Judgment Display: Tricolor LED (Orange, green, red) Judgment outcome(HI, OK, LO)
Standard external I/O	Control Input Latch, hold, zero	Control I/O	Analog Amplifier Output ±10V D/A Analog Voltage Output ±10V External Input Zero correction, hold, latch etc. 3 Comparator outputs (relay output)
Power	AC100 to 240V (50/60Hz) Approx. 20VA	AC100 to 240V (50/60Hz) Approx. 10VA	AC100V to 240V (50/60Hz) Approx. 20VA
Operating temperature	−10°C to 40°C	−10°C to 40°C	−5°C to 40°C
Operating humidity	Below 85%RH (no condensation)	Below 85%RH (no condensation)	Below 85%RH (no condensation)
Physical dimensions	96(W) × 48(H) × 146.6(D) mm (Includes protrusions)	96(W) × 48(H) × 127.5(D) mm	96(W) × 96(H) × 167.7(D) mm
Options	OP-200 Relay Output OP-030 RS-485 OP-040 RS-232C OP-007 Analog Output 0-10V, 4-20mA OP-237 Relay Output, RS-485, Analog Output OP-247 Relay Output, RS-232C Analog Output *Only one option can be selected*	AD4530-200 Relay output AD4530-030 RS-485 AD4530-040 RS-232C AD4530-007 Analog Output 0-10V 4-20mA AD4530-237 Relay Output, RS-485, Analog Output AD4530-247 Relay Output, RS-232C, Analog Output *Only one option can be selected*	OP-01 Parallel BCD Output (Open collector) OP-04 RS-232C OP-07 D/A Analog Voltage/Current Output (±10V, 4-20mA) OP-08 Ethernet *Only one option can be selected*

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

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