



AD-4401 Batch Weighing Indicator

Fuzzy Logic and Automatic Free Fall Compensation. Enter setpoints through front keys or external thumbwheels. Hold and Peak Hold functions. Weigh-In and Loss-in-Weight batching. Check Weighing.

Assign up to 6 input functions from a selection of 14,



AD-4401

Part Number

AD-4401 Batch Weighing Indicator

Options

AD-4401-01 Parallel BCD output open collector

AD-4401-03 RS422/485 serial output

AD-4401-04 RS232C serial output

AD-4401-05 Setpoint Unit

AD-4401-07 Analog output 4-20 ma

SPECIFICATIONS

LOAD CELL10 VDC +/- 5%, 230 ma
(8)350 or (16) 700 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.3 μ V per div min

CONVERSION17 times/sec display update
100/sec sample rate for internal setpoint comparison
Sigma Delta conversion
16,000 display divisions
1,000,000 internal divisions

ACCURACY0.01% of full scale

OUTPUT20ma serial loop
RS232, RS422/485, 4-20ma, BCD *
Baud 600, 1200, 2400, 4800, 9600, O, E, N
100 ingredients
Setpoint relays *
* Optional

KEYS..... SETPOINT, ZERO, TARE, NET/GROSS, F, ENTER, OPR/STB/ESC

ANNUNCIATORS ...Zero, MD, Gross, Net, Hold, Alarm, Final, F.Fall, Prelm, OP.PLM, Over, Under, Z.Band

DISPLAYBright easy to see cobalt blue 13mm high
999,950 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER120 VAC +/-10%, 50/60Hz, 20 watts

SIZE5.67"W x 7.76"D x 2.83"H, 4 lb
Plastic enclosure, panel mount only



AD-4402

AD-4402 Batching/Network Weighing Indicator

Multiple sequences & functions for filling, mixing, timing functions can be pre-programmed in this unit. Stores 100 sets of ingredient data, 100 sets of recipe codes. Select from 50 functions for each of 11 control inputs and 11 control outputs. 100 times per second high speed sampling. Compact DIN table or panel mounting. Standard RS485 communication for up to 32 units. Option cards for CC Link, Device Net & Profibus.

Part Number	Weight	Stock
AD-4402 Batching Network Indicator	5 lb	

Options

AD-4402-01 Parallel BCD output-open collector	1 lb	5522
AD-4402-02 Relay output	1 lb	5523
AD-4402-03 RS422/485 serial output	1 lb	5524
AD-4402-04 RS232 serial output	1 lb	5525
AD-4402-05 Parallel I/O	1 lb	5526
AD-4402-07 Analog 4-20ma output	1 lb	5527
AD-4402-20 CC link interface	1 lb	5528
AD-4402-21 Device Net interface	1 lb	5529
AD-4402-22 Profibus interface	1 lb	5530

SPECIFICATIONS

LOAD CELL 10 VDC +/- 5%, 230 ma
(8)350 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT 0.6 μ V to 200 μ V per div

CONVERSION 17 times/sec display update
100/sec sample rate for internal setpoint comparison
Delta sigma conversion
16,000 display divisions
1,000,000 internal divisions

OUTPUT BCD
RS232, RS422, RS485 *
Baud 600, 1200, 2400, 4800, 9600, O, E, N
100 ingredients
Setpoint relays *
* Optional

KEYS..... F1/F3, F2/F4, SHIFT, CODE RECALL/CODE SET, A/a, 1-0,ESCAPE, ENTER, NET/GROSS, TARE, ZERO

ANNUNCIATORS Stable, Net, Gross, Full, Zero Band, Fast Flow, Medium Flow, Dribble Flow, Finish, Tare Entry

DISPLAY Blue VFD 0.7" (18mm) high
16,000 max display
Decimal point selectable
Display div 1,2,5,10,20,50

SUB DISPLAY (4) lines alpha characters 0.2" high VFD
Displays status information

POWER 85-250 VAC +/-10%, 50/60Hz, 20 watts

SIZE 7.5"W x 5.3"D x 3.8"H, 5 lb
Plastic enclosure.
Table and panel mount



AD-4405 Weighing Indicator

A general purpose Weighing Indicator. 1/40,000 display resolution. Mount on table, wall or desktop. Bright blue VFD display. Front panel is waterproof, protected to IP65. RS232 standard. Counting mode. Digital linearization. Accumulator with auto or manual entry. Optional relay outputs or 4-20ma analog output. 3 input signals for external control, input signal can be selected from zero, tare, mode, net/gross, print, M+. NTEP 04-034 III/IIIL 10,000 div.

Part Number	Weight	Stock
AD-4405 Weighing Indicator	6 lb	6141

Options

AD-4405-03 RS422/485/Relays (replaces std RS232)	1 lb	6142
AD-4405-05 RS232 w/Relays (replaces std RS232)	1 lb	6143
AD-4405-06 Built in printer w/time & date	1 lb	6144
AD-4405-07 Analog output 4-20 ma (replaces std RS232)	1 lb	6145



AD-4405



SPECIFICATIONS

LOAD CELL5 VDC +/- 5%, 60 ma
(4)350 or (8) 700 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT02 μ V per div min

CONVERSION10 times/sec display update
Integrating dual slope type
40,000 display divisions
1,000,000 internal divisions

ACCURACY0.01% of full scale

OUTPUT RS232 serial
RS422/485/Relays replaces std RS232 *
RS232 w/Relays replaces std RS232 *
Baud 600, 1200, 2400, 4800, 9600, O, E, N
* Optional

KEYS..... CODE, SAMPLE, SET POINT, PT, TOTAL,
ZERO, TARE, M+, START, STOP, FEED,
MODE, NET/GROSS, ON/OFF, PRINT

ANNUNCIATORS Stable, Net Zero, PT, Ready, M+, 1-3, HI, OK, LO

DISPLAY Bright easy to see cobalt blue 13mm high
999,950 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER 100-240 VAC +/-10%, 50/60Hz, 30 VA

SIZE 10.83"W x 4.37"D x 6.26"H, 6 lb
Desktop, panel, wall mount
Plastic enclosure, IP65



AD-4406



AD-4406 Weighing Indicator

A general purpose Weighing Indicator. 1/40,000 display resolution. Mount on table, wall or desktop. Large 1" high LCD display. Front panel is waterproof, protected to IP65. Counting mode. Digital linearization. RS232 standard. Accumulator with auto or manual entry. Optional relay outputs or 4-20ma analog output. 3 input signals for external control. NTEP 04-034 III/IIIL 10,000 div.

Part Number	Weight	Stock
AD-4406 Weighing Indicator	6 lb	

Options

AD-4406-03 RS422/485/Relays solid state AC output Replaces standard RS232	1 lb	6147
AD-4406-05 RS232 w/Relays solid state AC output Replaces standard RS232	1 lb	6148

AD-4406-07* Analog output 4-20 ma (replaces std RS232)	1 lb	6149
AD-1681 Rechargeable battery pack	2 lb	3122

* Analog output card comes with its own AC adapter. When the analog output card is installed, (2) AC adapter will be used, one for the basic indicator and one for the analog output.

SPECIFICATIONS

LOAD CELL5 VDC +/- 5%, 60 ma
(4)350 or (8) 700 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.2 μ V per div min

CONVERSION10 times/sec display update
Integrating dual slope type
40,000 display divisions
1,000,000 internal divisions

ACCURACY0.01% of full scale

OUTPUTRS232 serial
RS422/485/Relays replaces std RS232 *
RS232 w/Relays replaces std RS232 *
Baud 600, 1200, 2400, 4800, 9600, O, E, N
* Optional

KEYS.ZERO, TARE, NET/GROSS, F1, F2, ON/OFF

ANNUNCIATORSStable, Net, Zero, Hi, Ok, Lo, Ready, Batt, M+

DISPLAYLarge 1" high LCD display
999,950 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER120 VAC +/-10%, 50/60Hz, 30 VA
AC adapter or alkaline C battery operation.
180 hours life with (1) 350 ohm load cell
70 hours life with (4) 350 ohm load cells

SIZE7.56"W x 3.43"D x 3.78"H, 6 lb
Bracket included for desktop or wall mount.
Panel mount
Plastic enclosure, IP65



NEW

FS-D Weighing Indicator

Stainless steel housing. Standard and take-away checkweighing. 0.5 sec measurement time. Auto tare function. Negative comparison. Drive up to 4 x 350 ohm load cells. Can be programmed to only the following 8 fixed capacities - 6, 15, 30, 60, 150, 300, 600, 1500 kg. 2 year warranty.

Part Number	Weight
FS-D Indicator	14 lb

Options

HC-06i Rechargeable battery pack	5 lb
FS-03i RS232C & Relay output	1 lb
FS-04 RS485 & Relay output*	1 lb

*FS-03i and FS-04 cannot be used at the same time.



FS-D



SPECIFICATIONS

LOAD CELL5 VDC +/- 5%, 60 ma
(4) 350 ohm load cells
No remote sensing

ANALOG INPUT0.2 µV per div min

CONVERSIONUpdate rate 20 times/second

ACCURACY0.01% of full scale

OUTPUTRS232 & comparator relay*
RS422/485 & comparator relay*
* optional

KEYS.ON/OFF, RECALL, KEY, SAMPLE, PT,
STORE, LO, HI, TARE, UNITS, DISPLAY
ZERO, CLEAR, PRINT/ENTER

ANNUNCIATORSStable, Net, Zero, Print, PT, Lo, Ok, Hi

DISPLAY7 segment LCD. 0.73" with backlight

POWER100-240 VAC +/-10%, 50/60Hz, 30 VA
80 hours (depends on usage)

SIZE9.8"W x 8"D x 10.5"H
desktop/wall mount stand and connector
plug for use with platforms from A&D
Weighing and most manufacturers.
SS enclosure, IP65



A&D WEIGHING DIVISION



AD-4321



AD-4321 Weighing Indicator

Service parts only.

Part Number	Weight
Service Parts	
01 Parallel BCD output TTL level	1 lb
05 Stainless steel water resistant enclosure	1 lb
PZ:710A A/D converter board	1 lb
08:A47486 capacity tag	1 lb
JM:NJC-207-PF load cell connector	1 lb
JM:NJC-207-RM connector w/flange for rear panel	1 lb



AD-4322A MKII Weighing Indicator

10 key pad for easy tare entry. 100 I.D. code (8 digit) memory information blocks that contain Tare, Comparator limits, running code total weight and number of weighing events for each separate coded item. 50 tare weights can be stored in memory by I.D. number. Full Digital Calibration (FDC) for easy setting of zero and span. Digital linearization function to compensate for non-linearity of load cells. Will switch from lb to kg at the press of a button. Standard 20 ma serial output. Digital filter with four settings for everything from high speed automated weighing to animal weighing. Waterproof keyboard makes this indicator very useful in a variety of environments. Optional built in printer. Panel mount, desk top or wall mount. Twin displays. One display for weight, other for parameter setting, optional time and date. Peak hold circuit, built in comparator, complete RFI protection. NTEP approved Truck Scale program for general applications and Weigh-In, Weigh-Out usage.

S.WA 4315

NTEP 89-037 III/IIIL 10,000 div.



AD-4322A MKII
w/ optional printer



Part Number	Weight	Stock
AD-4322A MKII Indicator, basic	10 lb	
AD-4322A MKII-08 Indicator w/printer	11 lb	1680

Options

AD-4322-01 Parallel BCD output open collector	1 lb	1575
AD-4322-01A Parallel BCD output TTL levels	1 lb	1929
AD-4322-02 Setpoint interface	1 lb	1771
AD-4322-04 Serial output (RS232/current output)	1 lb	1576
AD-4322-07 Analog output 4-20ma	1 lb	1577
AD-4322-08 Built in printer	1 lb	1578
AD-4322-09 Digital clock(time & date)for use w/printer	1 lb	1579
AD-4322-10 Panel mount kit	1 lb	1109
AD-4322-11 Wall mount kit	1 lb	1110

Service Parts

JM:NJC-207-PF load cell connector	1 lb	642M
JM:NJC-207-RM connector w/flange for rear panel	1 lb	474M
WP:PP129-28A Thermal paper for printer, pack of (5)	1 lb	1750
01:A39844 Keysheet overlay	1 lb	65
PZ:2084 Switchboard (behind overlay)	1 lb	66
PZ:2082 Main board for AD4322A MKII	1 lb	1552
Instruction manual	1 lb	664
Maintenance manual	1 lb	665

SPECIFICATIONS

LOAD CELL12 VDC +/- 5%, 280 ma
(8)350 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.6 μ V to 200 μ V per div

CONVERSIONUpdate rate 16 times/sec
20,000 display divisions
330,000 internal divisions

ACCURACY0.01% of full scale

OUTPUT20ma serial loop
RS232 & 20ma serial loop or BCD *
Baud 600, 1200, 2400, 4800, 9600, even
4-20ma analog *
Setpoint interface *
* Optional

KEYS. ZERO, NET/GROSS, TARE, CODE, M+, M-,
STORE, RECALL, TOTAL, PRINT, FEED,
STANDBY/OPERATE

ANNUNCIATORSCenter of Zero, Motion Detection, Net/Gross,
Tare Entered, kg, lb, Under, Accept, Over

DISPLAYBright easy to see cobalt blue 0.5" high
500,000 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER120 VAC +/-10%, 50/60Hz, 200 watts

SIZE200W x 142D x 186H mm, 10 lb
Desk top or panel mount
Plastic enclosure



A&D WEIGHING DIVISION



AD-4323



AD-4323 Digital Weighing Indicator

Includes all the latest improvements to be a successor to the reliable AD4316. Standard functions are 17 updates/second, full RFI protection, digital filtering, DIN panel cutout, full digital calibration, no pots, set point interface, serial current loop output.

S.WA 4298

NTEP 88-095 III/IIIL 10,000 div.

Part Number	Weight	Stock
Service Parts only.		

Field installable options

AD-4324-01 Parallel BCD output-open collector	1 lb	
AD-4323-01A Parallel BCD output-TTL level	1 lb	1846
AD-4324-04 Serial output RS232C/20ma loop	1 lb	1445
AD-4323-07 Analog output 4-20 ma	1 lb	1446M

Service Parts

JM:NJC-207-PF load cell connector	1 lb	642M
01:A34806 keysheet overlay	1 lb	678
PZ:2074 display board	1 lb	325
PZ:2074/2075 display & main board	1 lb	326
PZ:2076 Switchboard (behind overlay)	1 lb	534
PZ:2077 A/D converter board	1 lb	688

SPECIFICATIONS

LOAD CELL12 VDC +/- 5%, 280 ma
(8)350 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.6 μ V to 36 μ V per div

CONVERSION17 times/sec display update
70/sec sample rate for internal setpoint comparison
Integrating dual slope
10,000 display divisions

ACCURACY0.01% of full scale

OUTPUTRS232 & 20ma serial loop or BCD *
Baud 600, 1200, 2400, 4800, 9600, even
4-20ma analog *
* Optional

KEYS.....ZERO, TARE, GROSS/NET, PRINT,
STANDBY/OPERATE

ANNUNCIATORS ...Zero, MD, Net/Gross, Tare entered, lb, kg

DISPLAYBright, easy to see cobalt blue 0.5" high
500,000 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER120 VAC +/-10%, 50/60Hz, 20 watts

SIZE7.6"W x 7.4"D x 3.8"H, 7 lb
Desk top or panel mount plastic enclosure



AD-4325A Batch Weighing Indicator

Up to 100 coded groups of setpoint values can be stored in memory. This indicator eliminates the need for external setpoint units. All setpoint functions and memory are built in.

A new "*" key easily recalls the next setpoint group for multi-ingredient batching. Three-Gate control of full, medium and dribble flow gates is easy with the built-in automatic mode or the customer programmed control modes. The customer programmed mode allows for full interaction with software or programmed logic control boards.

With a new approach to features such as flexible front-panel command, BCD code input, control I/O, or complete RS232C serial interface system- integration, the AD-4325A gives you complete batching control with memory and the automatic data collection/output.

Stores up to 100 coded groups of setpoint values with running totals for each group. Automatic Free Fall Compensation constantly updates the free fall value for greater filling accuracy. Unrivalled conversion speed of 70 times/sec. Standard current loop for output to an external printer. Protected from electromagnetic (EMI) and radio frequency (RFI) interference. Full Digital Calibration of Zero and Span.

Canadian AM 4802
NTEP 92-177 III/IIIL 10,000 div.

Part Number	Weight	Stock
AD-4325A Batch Weighing Indicator	13 lb	1699

Options

AD-4342-04 Serial output/RS232, 20mA loop	1 lb	1445
AD-4325-02 Relay output	2 lb	1037

Service Parts

Maintenance manual with parts list and schematics	1 lb	1704
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AD-4325A

SPECIFICATIONS

LOAD CELL12 VDC +/- 5%, 280 ma
(8)350 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.6 μ V to 200 μ V per div

CONVERSION17 times/sec display update
70/sec sample rate for internal setpoint comparison
Dual slope integration
10,000 display divisions
96,000 internal divisions

ACCURACY0.01% of full scale

OUTPUT20ma serial loop
RS232 & 20ma serial loop or BCD *
Baud 600, 1200, 2400, 4800, 9600, O, E, N
100 ingredients
Setpoint relays *
* Optional

KEYS..... OPERATE/STANDBY, ZERO, TARE, TARE CLEAR, NET/GROSS, *

ANNUNCIATORSZero, MD, Gross, Net, Tare entered, Hold, kg, t

DISPLAYBright easy to see cobalt blue 0.5" high
500,000 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER120 VAC +/-10%, 50/60Hz, 20 watts

SIZE10.63"W x 8.4"D x 4.72"H, 13 lb
Plastic enclosure, panel mount only

Indicators

A&D

A&D WEIGHING DIVISION



AD-4327A



AD-4327B

AD-4327 Weighing Indicator

Service parts only.

Part Number	Weight	Stock
Service Parts		
JM:NJC-207-PF load cell connector	1 lb	
JM:NJC-207-RM connector w/flange for rear panel	1 lb	474M
TB:163 Adapter 120VAC/7.5VDC,500ma	1 lb	2730MB
08:C42675B Keysheet overlay AD-4327A	1 lb	2726
08:C42677A Keysheet overlay AD-4327B	1 lb	2727
08:B31449B Display overlay AD-4327B	1 lb	2793

SPECIFICATIONS

LOAD CELL5 VDC +/- 5%, 90 ma
(6)350 or (12)700 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT0.2 μ V to 120 μ V per div

CONVERSIONUpdate rate 5 times/sec
10,000 display divisions
40,000 internal divisions

ACCURACY0.01% of full scale

OUTPUTRS232 & 20ma serial loop or set points *
Baud 600, 1200, 2400, 4800, 9600, even
* Optional

KEYS.ON/OFF, MODE, ZERO, TARE, NET/GROSS,
SAMPLE, PRINT

ANNUNCIATORSMD, Zero, Gross, Net, Under, Target, Over

DISPLAYLarge easy to see LCD 0.87" high
199,980 max display
Decimal point selectable
Display div 1,2,5,10,20,50

POWER(6) "C" size batteries or 120 VAC adapter,
160 hours w/alkaline cells driving a load cell.

SIZE11.00"W x 6.30"D x 5.12"H, 10 lb
Desk top or wall mount
NEMA 4 **stainless steel** enclosure



AD-4328 Digital Weighing Indicator

A low cost, general purpose Weighing Indicator. Full digital calibration. Mount on panel or desktop. Comparator function and optional relay/transistor output. HI/GO/LO comparator and simple weighing-in comparator can be selected. Bright red LED display. Front panel is splashproof, equivalent to IP65. Includes 120VAC adapter.

Canadian AM-5252
NTEP 99-074 III/IIIL 10,000 div.

Part Number	Weight
AD-4328 Weight Indicator	8 lb

Options

4328-01 BCD output open collector	1 lb
4328-02 Comparator outputs open collector	1 lb
4328-03 RS-422/485 Serial interface w/comp output	1 lb
4328-04 RS232,20ma & Comparator relay output	1 lb
4328-10 Indicator stand	1 lb

Service Parts

TB:163 Adapter 120VAC/7.5VDC,500ma	1 lb
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AD-4328

SPECIFICATIONS

LOAD CELL 5 VDC +/- 5%, 90 ma
(6)350 or (12)700 ohm load cells
Remote sensing for long cable runs

ANALOG INPUT 0.2 μ V to 375 μ V per div

CONVERSION 10 times/sec display update
Dual slope integration
20,000 display divisions
40,000 internal divisions

ACCURACY 0.01% of full scale

OUTPUT 20ma serial loop
Parallel BCD open collector transistor *
Comparator output, open collector transistor *
RS422/485 serial w/comparator output*
RS232/20ma/Comp relay 100ma,50VDC*
Baud 600, 1200, 2400, 4800, 9600, even
* Optional

KEYS OPERATE/STANDBY, PRESET TARE, M+,
MODE, NET/GROSS, ZERO, TARE, PRINT

ANNUNCIATORS Zero, MD, Gross, Net, PT, lb, kg

DISPLAY Bright red LED 14.2mm high
6 digits 7 segment
Decimal point selectable
Display div 1,2,5,10,20,50

POWER Nominal 9VDC(6VDC to 12VDC)
AC adapter 120 VAC 50/60Hz, 4 watts

SIZE 6.6"W x 5"D x 5.5"H, 8 lb
Desk top or panel mount
Plastic enclosure



A&D WEIGHING DIVISION



AD-4329



AD-4329 Weighing Indicator

Triple ranges on weighing capacities. Standard RS232 and 20 ma current loop serial output. 4-point digital linearization across the full span. Standard accessories included: 2m cable for 120 VAC, load cell connector, capacity sticker, external input plug, (4) rubber feet, current loop output plug. NTEP 03-046 III/IIIL 10,000 div

Part Number	Weight	Stock
AD-4329 Indicator	8 lb	

Options

AD-4329-01 BCD output replaces standard RS232	1 lb	614
AD-4329-02 Relay outputs (3) 250 VAC or 30 VDC	1 lb	615

Service Parts

JM:NJC-207-PF load cell connector	1 lb	642M
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SPECIFICATIONS

LOAD CELL5 VDC +/- 5%, 120 ma (8)350 ohm load cells Remote sensing for long cable runs	KEYS	OPERATE/STANDBY, PRESET TARE, M+, MODE, NET/GROSS, ZERO, TARE, PRINT
ANALOG INPUT02 µV per div	ANNUNCIATORS . . .	M+, MD, Gross, Net, PT, Zero, kg, lb
CONVERSION	Update rate 10 times/sec 20,000 display divisions 40,000 internal divisions	DISPLAY	Bright easy to see cobalt blue 0.5" high 7 digit max display Decimal point selectable Display div 1,2,5,10,20,50
ACCURACY01% of full scale	POWER	120 VAC +/-10%, 50/60Hz, 30 watts
OUTPUT	RS232 20ma serial loop Baud 600, 1200, 2400, 4800, 9600, even BCD * Relay outputs * * Optional	SIZE192W x 165D x 96H mm, 8 lb 7.56" x 6.5"D x 3.78"H Desk top or panel mount Plastic enclosure