EM-DLC*

AD-4212C

Series

* *The EM-DLC is a high precision electromagnetic weighing sensor with an integrated analog-to-digital converter.*

Remote controller (optional)

To those who wish to double the production efficiency

ISO 9000 CERTIFIED

A&D Company, Limited

...Clearly a Better Value

http://www.aandd.jp

Learn Exactly How to Improve Your Production-line Weighing System!

Do you struggle with any of the following problems…?

- *Weighing is slow.*
- *Instruments take up space.*
- *Weighing sensors do not last long.*
- *Display units are redundant.*
- *Cabling is complex and expensive.*

If your answer is "yes," the AD-4212C Series of electromagnetic digital load cells (EM-DLC) are definitely worth trying. Because of...

Fast Stabilization of 0.5 Seconds

Using our field-proven, Compact Super Hybrid Sensor (C-SHS)[i] technology, the AD-4212C realizes a weighing speed of 0.5 seconds or less for 1 mg resolution[ii] (1.3 seconds for 0.1 mg resolution).

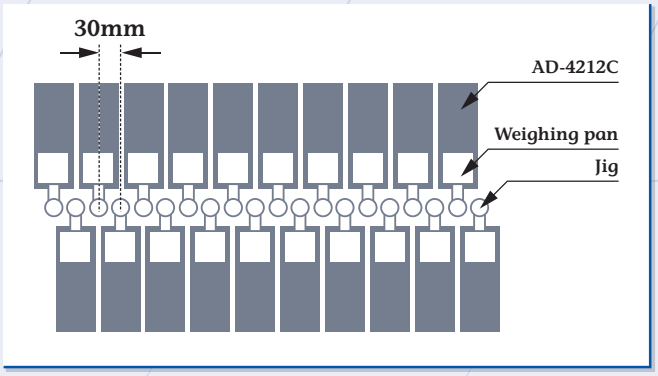
∗i *Patent pending*
∗ii *For weighing of up to 30 g excluding the tare*

Please visit our video library at www.aandd.jp to see a demonstration.

Compact Size with a 59 mm Width

Again, thanks to the C-SHS, the width of the AD-4212C is just 59 mm, making it ideal for installation in narrow spaces.

Installation images



High Durability and Protection

Our tests have shown that the AD-4212C can easily withstand 10 million repeated loadings or more. In addition, the AD-4212C incorporates our patented shock absorber under the weighing pan. It copes with movement in all directions so that the sensor is protected from actuator malfunctions.

IP65 Dust and Water-proof Construction

The AD-4212C is well suited for powder or liquid weighing. The IP65 construction protects it from any accidental spilling in measurement.

Direct Connection to a Panel Computer, PC, or PLC

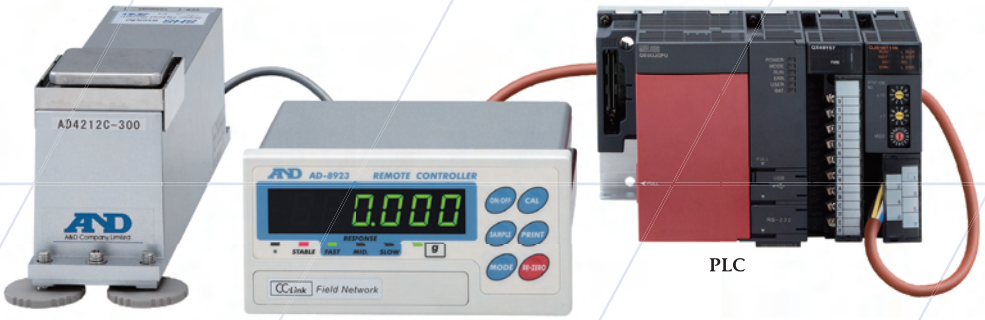
The AD-4212C has a sophisticated analog-to-digital converter inside. It can therefore output digital data directly to an external device via its standard RS-232C interface. Whether to add a display unit, such as the AD-8923-CC/BCD or AD-8922A (both sold separately), is completely up to you.

CC-Link Connection through the AD-8923-CC

The optional remote controller, the AD-8923-CC,[iii] is equipped with a CC-Link interface.[iv] It can transmit the data received from the AD-4212C to a PLC using CC-Link, in addition to displaying the weighing results, changing response speed, and performing calibration.

*iii *The AD-8923-CC and AD-4212C can share the same power supply.*

*iv *If you prefer a BCD output, the AD-8923-BCD is also available.*



AD-8923-CC (sold separately)

Other Features

- ✔ **Securable to a base by replacing leveling feet with screws**
- ✔ **High-speed data transmission of up to 50 times/second**
- ✔ **Easy calibration and response speed adjustment using the provided WinCT-AD4212C software**
- ✔ **Also comes with a free calibration mass (200 g, OIML class E2 equivalent)**
- ✔ **LAN communication using the AD-8526 serial/Ethernet converter (sold separately)**

Possible applications include the management of filling amounts (e.g. electrolyte in batteries or medicines in capsules), management of coating amounts (e.g. liquid resin on LEDs, resist ink on FPDs, grease on bearings, or solder paste on electronic parts), control of dispensed amounts (e.g. ink from ink-jet printers), and many more!

Specifications

		AD-4212C-301	AD-4212C-300	AD-4212C-600	AD-4212C-3100	AD-4212C-3000	AD-4212C-6000
Weighing capacity		51 g / 320 g[v]	320 g	620 g	510 g / 3200 g[v]	3200 g	6200 g
Minimum weighing value (d)		0.0001 g / 0.001 g	0.001 g	0.001 g	0.001 g / 0.01 g	0.01 g	0.01 g
Repeatability (Standard Deviation)		0.0002 g / 0.001 g	0.001 g	0.001 g	0.002 g / 0.01 g	0.01 g	0.01 g
Linearity		±0.002 g	±0.002 g	±0.005 g	±0.02 g	±0.02 g	±0.04 g
Stabilization time (when set to FAST under a good environment)		d = 0.0001 g : 1.3 sec.[vi]	0 – 30 g : 0.5 sec.	0 – 30 g : 0.5 sec.	d = 0.001 g : 1.3 sec.[vi]	0 – 300 g : 0.5 sec.	0 – 300 g : 0.5 sec.
		d = 0.001 g : 1.0 sec.	30 – 320 g : 1.0 sec.	30 – 620 g : 1.0 sec.	d = 0.01 g : 1.0 sec.	300 – 3200 g : 1.0 sec.	300 – 6200 g : 1.0 sec.
Display refresh rate		10[vii] - 50 times/second					
I/O unit (RS-232C)		Bi-directional, 2400[vii] - 19200 bps					
Sensitivity drift		±2 ppm/˚C (10 ˚C to 30 ˚C / 50 ˚F to 86 ˚F)					
Operating environment		5 ˚C to 40 ˚C (41 ˚F to 104 ˚F), 85%RH or less (no condensation)					
Calibration mass provided		200 g (equivalent to OIML Class E2)					
Applicable calibration mass value		50 g, 100 g 200 g[vii], 300 g	50 g, 100 g 200 g[vii], 300 g	50 g, 100 g 200 g[vii], 300 g 400 g, 500 g 600 g	50 g, 100 g 200 g[vii], 300 g 400 g, 500 g 1000 g, 2000 g 3000 g	50 g, 100 g 200 g[vii], 300 g 400 g, 500 g 1000 g, 2000 g 3000 g	200 g[vii], 500 g 1000 g, 2000 g 3000 g, 4000 g 5000 g, 6000 g
Weighing unit	Dimensions	59(W) X 231(D) X 91(H) mm					
	Weighing pan	50 X 50 mm					
	Net weight	Approx. 1.6 kg					
Connection cable		Approx. 10 m					
Power supply		AC adapter					
Power consumption		Approx. 11VA (supplied to the AC adapter)					

*v Smart range function: The display will switch to the standard range automatically when the value exceeds 51 g/510 g but return to the precision range by performing RE-ZERO (tare).
*vi When the precision range is used
*vii Factory setting

Accessories

AD-1683	Static eliminator
AD-1684	Electrostatic fieldmeter
AD-1689	Tweezers for calibration mass
AD-8121B	Compact printer
AD-8922A	Remote controller
AD-8922A-01	BCD output interface[viii]
AD-8923-BCD	Remote controller (BCD)
AD-8923-CC	Remote controller (CC-Link)
AD-8526	Serial/Ethernet converter
AX-USB-9P	Serial/USB converter
AX-KO3590-1000	RS-232C output cable (10 m)[ix]
AX-KO3590-500	RS-232C output cable (5 m)[ix]
AX-KO3590-200	RS-232C output cable (2 m)[ix]

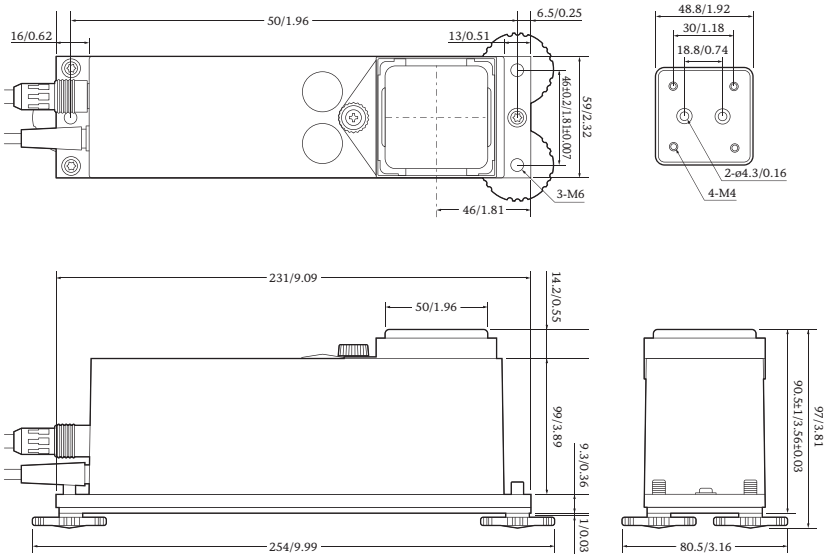
*viii Exclusively for the AD-8922A
*ix Exclusively for the AD-4212C

AD-8922A

AD-1683

AD-1684

Dimensions (mm/inches)



Materials

Weighing pan = SUS316
Breeze break = SUS304
Upper case = Zinc die-cast (acrylic coating on epoxy basecoating)

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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