

# Compact Precision Balances

# EJ

## Series

**EJ-1202**

1200 g × 0.01 g

**EJ-3002**

3100 g × 0.01 g

**EJ-123**

120 g × 0.001 g

**EJ-303**

310 g × 0.001 g

*Price or readability? — BOTH!*



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**AND**  
A&D Company, Ltd.

Discover Precision

<http://www.aandd.jp>

# When Your Budget Is Tight But Precision Is Non-Negotiable...

Forget about those expensive electromagnetic force restoration\*<sup>1</sup> balances. A&D's latest load cell technology employed in the EJ series now challenges their established edge, offering a way to spend less without compromising on precision... and functionality as well!

## High resolution (1/120,000 - 1/310,000) load cell as the weight sensor

The EJ series achieves a readability of 0.001 g for a capacity up to 310 g, or 0.01 g for a capacity up to 3100 g. It is suitable for use in diverse applications in schools, laboratories and factories that require highly precise measurement. Meanwhile, the use of a load cell instead of an electromagnetic sensor keeps its prices surprisingly affordable.

## Breeze break with anti-static coating (for the EJ-123/303)

The 0.001 g readability models are equipped as standard with a breeze break to minimize the effects of drafts to ensure stable weighing. The anti-static coating also prevents weighing becoming unstable due to static from nearby objects.

## Clearly-visible, LCD display (16 mm character height) with backlight

The backlight makes the weighing results easy to read even in a dimly-lit area.

## Stainless steel (SUS304) pan

The surface is resistant to chemicals and scratches.

## Adjustable response characteristics

Depending on the degree of vibration and draft, you can select one of three different combinations of weighing speed and stability to effectively cope with their adverse effects on weighing performance.

## Display hold function

This function locks the display once the stable indicator is lit. The display stays locked as long as the weight value stays within set limits, making it easier to read and record the display value when, for example, using the balance where external disturbances can occur unexpectedly or measuring a dispensed amount of a volatile liquid.



\*<sup>1</sup> Method most commonly adopted for balances with resolutions of one over several hundred thousand or higher. It determines a mass from the amount of current required to generate the electromagnetic force on one side of a lever that equalizes with the mass placed on the other side.



Optional



## Counting mode with ACAI function

This mode lets you count a number of small pieces of the same mass value quickly, effortlessly and precisely. The Automatic Counting Accuracy Improvement (ACAI) function recalculates the average unit weight each time a sample is added to eliminate errors caused by variations in unit weight.

## Percent mode function

The weight value can be displayed as a percentage of a reference mass, which is useful for target weighing or checking the sample variation.

## Accumulation (M+) function

The balance can sum separate weighing results and display the total value, saving you from the hassle of performing the addition by yourself and making errors. It also counts and displays the number of times weighing is performed.

## Two kinds of data communication interfaces (optional)\*2

- **Quick USB interface (EJ-02)**, which allows you to send weighing data to Microsoft Excel, Word, Notepad, etc., without installing any drivers or other additional software on a PC\*3
- **RS-232C interface (EJ-03)** for bi-directional communication with a PC, printer or other peripheral devices

\*2 Only one of the two can be installed at a time.

\*3 For transferring weighing data from the balance to a PC only. Please use the RS-232C interface with the AX-USB-9P serial/USB converter for bi-directional communication or GLP output via USB.

## GLP/GMP/GCP/ISO compliant output

For documentation required by GLP, GMP, GCP, ISO, etc., the balance can output the manufacturer name, model name, serial number, ID number (six alphanumeric characters you set), and space for signature with weighing or calibration results. The date and time can be added as well when printing out the results using the AD-8127 compact printer.

## Density determination function (EJ-123/303 only)

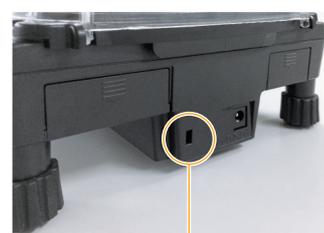
To obtain the density of the sample, you are simply required to input the water temperature (or a density value directly if a liquid other than water is used) and weigh the sample in air and in water using the optional density determination kit (EJ-13). The balance will then automatically perform density calculation.



Density determination kit (EJ-13)

## Other features

- ✓ Multiple weighing units: g, oz, lb, ozt, ct, mom, dwt, gr, N, pcs (counting mode) and % (percent mode), in addition to SG (specific gravity)\*4
- ✓ Operation with either AC adapter or four AA batteries
- ✓ Auto power OFF function to avoid wasting power
- ✓ Security slot in the rear of the balance to accommodate an anti-theft lock



Security slot

\*4 Either t (tola) or tl (tael - HK general/Singapore, HK jewelry, or Taiwan) can be added upon request, and lb is not available with the EJ-123/303.

Specifications	EJ-123	EJ-303	EJ-1202	EJ-3002
Weighing capacity	120 g	310 g	1200 g	3100 g
Minimum weighing value	0.001 g		0.01 g	
Repeatability (standard deviation)	0.003 g		0.03 g	
Linearity	±0.003 g		±0.03 g	
Sensitivity drift	±20 ppm/°C (10 to 30°C/50 to 86°F)			
Counting mode	Min. unit weight* <sup>i</sup>	0.001 g	0.01 g	
	No. of samples	5, 10, 25, 50 or 100 pieces		
Percent mode	Min. % display	0.01%		
	Min. 100% weight	0.1 g	1 g	
Operating environment	10 to 30°C/50 to 86°F, 85% RH or less (no condensation)			
Display refresh rate	10 times / second			
Power supply	AC adapter or 4 AA batteries			
Battery life	Approx. 80 hours with alkaline batteries, backlight off			
Weighing pan size	Ø 110 mm		127 × 140 mm	
Net weight	Approx. 1160 g		Approx. 1490 g	
Applicable calibration weight* <sup>i</sup>	100 g	300 g	1000 g	3000 g
Standard accessories	Breeze break* <sup>ii</sup> , AC adapter, Instruction manual			

\*<sup>i</sup> Factory setting

\*<sup>ii</sup> For the EJ-123/303 only

## Options

**EJ-02\*<sup>iii</sup>** Quick USB interface

**EJ-03\*<sup>iii</sup>** RS-232C interface

**EJ-13\*<sup>iv</sup>** Density determination kit

\*<sup>iii</sup> EJ-02 and EJ-03 cannot be used at the same time

\*<sup>iv</sup> For the EJ-123/303 only

## Accessories

**AD-8127**

Compact printer

**AX-KO2466-200**

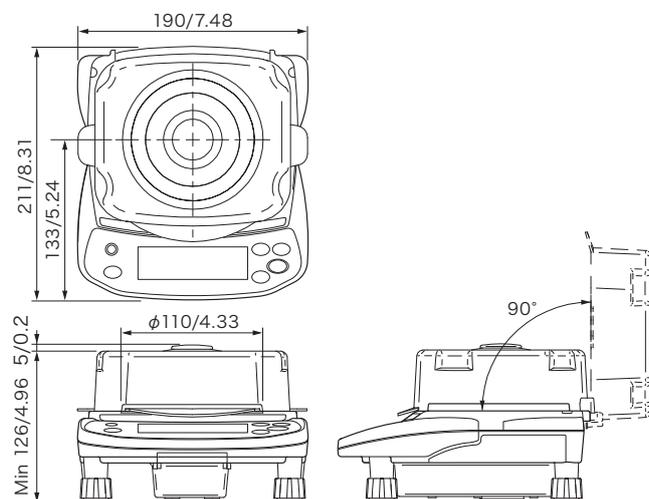
RS-232C cable (9P-9P, 2 m)

**AX-USB-9P**

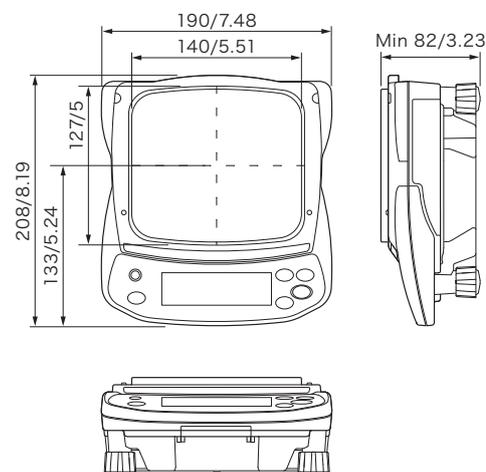
Serial/USB converter

## Dimensions (mm/inches)

### EJ-123/303 .....



### EJ-1202/3002 .....



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