

Compact Precision Balances

EJ Series



EJ-3002



EJ-123



EJ-54D2



Price or readability? —BOTH!

When Your Budget Is Tight but Precision Is Non-Negotiable...

Forget about those expensive electromagnetic force restoration*1 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 0.0002 g for a capacity of 22 g (lower capacity range of the EJ-54D2), 0.001 g for a capacity up to 310 g (higher capacity range of the EJ-54D2 and EJ-123/303), or 0.01 g for a capacity up to 3100 g (EJ-1202/3002).

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 force restoration sensor keeps its prices surprisingly affordable.

Breeze break with anti-static coating (for the EJ-54D2*2/123/303)

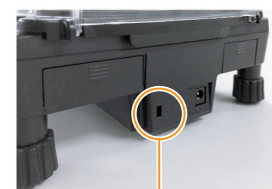
Minimizes the effects of drafts and blocks static electricity from nearby objects to ensure stable weighing.

Stainless steel (SUS304) pan

Resistant to chemicals and scratches.

Spirit level and leveling feet

Helps to keep the balance level and avoid inaccurate weighing



Security slot

Security slot in the rear

Accommodates an anti-theft lock.

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

Makes the weighing results easy to read even in a dimly-lit area.



*1 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.

*2 The breeze break of the EJ-54D2 is opened by sliding its upper surface to keep air turbulence to a minimum.

Extremely high sensitivity (EJ-54D2)

The EJ-54D2, a dual range model, has two weighing ranges with different capacities and readabilities, each range extending from zero to its capacity. The readability of the lower capacity (22 g) range is as fine as 0.0002 g (or 0.001 ct), which, for example, is ideally suited for precisely weighing/counting small pieces of precious metals/jewelries*³.

*³ A free carat pan is provided for the EJ-54D2 and can be used instead of the standard weighing pan. The breeze break can be easily detached for changing the pan as well as for cleaning (see below).



EJ-54D2

Carat pan



Meanwhile, the readability of the larger capacity (52 g) range is 0.001 g, which is the same as the EJ-123/303. The balance switches between the two weighing ranges either automatically or by manual operation depending on the internal setting.

Useful options

Data communication interfaces*⁴

- 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*⁵
- RS-232C interface (EJ-03) for bi-directional communication with a PC, printer or other peripheral devices

*⁴ Only one interface can be installed at a time.

*⁵ 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.

Density determination kit (EJ-13)*⁶

The balance can automatically calculate a density from the sample weight in air, sample weight in water and water temperature.

*⁶ For the EJ-123/303 only

Other features

- ✓ Adjustable response characteristics and display hold function to be used depending on the weighing/environmental conditions
- ✓ Counting mode with Automatic Counting Accuracy Improvement (ACAI) function
- ✓ Percent mode function to display the weight value as a percentage of a reference mass
- ✓ Accumulation (M+) function to display the sum total of separate weighing results
- ✓ Multiple units of measure: g, oz, lb, ozt, ct, mom, dwt, gr, N, pcs (counting mode) and % (percent mode), in addition to SG (density mode)*⁷
- ✓ GLP/GMP/GCP/ISO compliant output to meet documentation requirements
- ✓ Operation with either AC adapter or four AA batteries
- ✓ Auto power OFF function to avoid wasting power



EJ-13

*⁷ 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-54D2/123/303.

Specifications

	EJ-54D2		EJ-123	EJ-303	EJ-1202	EJ-3002
Capacity	22 g ^{*i}	52 g ^{*i}	120 g	310 g	1200 g	3100 g
Readability	0.0002 g ^{*i}	0.001 g ^{*i}	0.001 g		0.01 g	
Repeatability (standard deviation)	0.0004 g	0.001 g	0.003 g		0.03 g	
Linearity	±0.0006 g	±0.001 g	±0.003 g		±0.03 g	
Sensitivity drift	±20 ppm/°C (10 to 30°C/50 to 86°F)					
Operating environment	10 to 30°C/50 to 86°F, 85% RH or less (no condensation)					
Display type	7-segment LCD with backlight (character height: 16 mm)					
Display refresh rate	10 times / second					
Units of measure ^{*ii}	g (gram), oz (ounce), lb (pound), ozt (troy ounce), ct (metric carat), mom (momme), dwt (pennyweight), gr (grain), N (Newton), pcs (counting mode), % (percent mode), SG (density mode)					
Counting mode	Min. unit weight ^{*iii}	0.0002 g	0.001 g		0.01 g	
	No. of samples	5, 10, 25, 50 or 100 pieces				
Percent mode	% readability	0.01%				
	Min. 100% weight	0.02 g	0.1 g		1 g	
Power supply	AC adapter or four AA batteries					
Battery life	Approx. 70 hours with alkaline batteries, backlight OFF		Approx. 80 hours with alkaline batteries, backlight OFF			
Weighing pan size	Ø50 mm		Ø110 mm		127 × 140 mm	
External dimensions	190 (W) × 209 (D) × 114 (H) mm		190 (W) × 211 (D) × 131 (H) mm		190 (W) × 208 (D) × 82 (H) mm	
Net weight	Approx. 1020 g		Approx. 1160 g		Approx. 1490 g	
Applicable calibration weight ^{*iii}	50 g		100 g	300 g	1000 g	3000 g
Standard accessories	Breeze break ^{*iv} , AC adapter, Instruction manual					

*i The EJ-54D2 is a dual range model having two weighing ranges with different capacities and readabilities. Each range extends from zero to its capacity.

*ii 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-54D2/123/303.

*iii Factory setting

*iv For the EJ-54D2/EJ-123/303 only (the breeze break of the EJ-54D2 is opened by sliding its upper surface)

Options

EJ-02^{*v} Quick USB interface

EJ-03^{*v} RS-232C interface

EJ-13^{*vi} Density determination kit

EJ-27^{*v,vii} Wireless communication interface for EJ

*v EJ-02, EJ-03 and EJ-27 cannot be used at the same time.

*vi For the EJ-123/303 only

*vii To be paired with either the AD-8541-PC or AD-8931 (Please inquire as to whether these Bluetooth® devices are certified for use in your country.)

Accessories

AD-8127

Compact printer

AD-8541-PC

Wireless communication interface for PC

AD-8931

Wireless remote display

AX-KO2466-200

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

AX-USB-9P

Serial/USB converter with cable



Optional



Discover Precision

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