*Precision Balances*

# FZ-i
# FX-i

*Series*

ISO 9000 CERTIFIED

A&D ...Clearly a Better Value

A&D Company, Limited

http://www.aandd.jp

# "High Functionality You Can Afford"

*The FZ-i/FX-i Series, a new addition to A&D's precision balances, rivals our GX/GF Series in performance and quality, but offers higher accessibility, bringing to you a cost-effective solution for a diverse array of applications.*

## Newly developed, Air-pump Controlled Internal Calibration[i] *(FZ-i models only)*

∗i *Patent Pending*

For the internal calibration of the FZ-i Series, A&D adopted a direct-driving method that utilizes air pressure for its power source. This new method features a simple structure, high reliability and a fail-safe mechanism – the internal mass returns to the original position even if the calibration is interrupted by power failure, etc.

### *One Touch Automatic Calibration* *(FZ-i models only)*

**With just one press of a key, you can ensure the accuracy of your balance.**

## Compact, B5 Size Footprint

**By taking advantage of our Compact Super Hybrid Sensor (C-SHS) technology[ii], A&D has significantly reduced the size of the FZ-i/FX-i Series – 25% smaller footprint than the GX/GF Series, making it ideal for installation and use in narrow spaces.** ∗ii *Patent Pending*

## Fast, 1 Second Stabilization

**The C-SHS combines the best of magnetic force restoration and single point parallelogram load sensing technologies. This allows the C-SHS to realize a response speed of *just 1 second* while maintaining extremely high span stability. The FZ-i/FX-i Series will maximize your productivity and efficiency.**

## Shock Absorber Function[iii]

∗iii *Patent Pending*

**The internal shock absorber protects the C-SHS from the adverse effects of vertical and transverse overloading.**

*(FZ-i)* *(FX-i)*

## *RS-232C Interface* (standard)

**Bi-directional communication is possible with a PC, printer or other peripheral devices.**

## *Quick USB Interface* (FXi-02)

**The easy-to-use optional USB interface requires no driver or software installation for transfer of weighing data to a PC.**[iv]

*iv *Unidirectional communication from a balance to a PC only. Please use the standard RS-232C interface to send commands from a PC to the balance.*

## *LAN-Ethernet Interface* (FXi-08) *with WinCT-Plus Software*

**WinCT-Plus software makes it possible for the user to easily set up an IP address, subnet mask, etc. The user can also send commands for controlling and acquiring data from multiple balances.**

### Multiple Weighing Units

Programmable or standard weighing units of measurement can be selected; g, pcs, %, oz, lb, L oz, ozt, ct, mom, dwt, GN, tl, tol, mes and MLT

### GLP/GMP/GCP/ISO Compliant

In accordance with GLP and LIMS regulations, the balance ID number and calibration data can be printed out using A&D's AD-8121B or a PC

### Statistical Calculation Function

The balance displays and/or output statistical calculation data as No. (number of data), SUM (total), MAX (maximum), MIN (minimum), R [range (maximum – minimum)], AVE (average), SD (standard deviation) and CV (coefficient of variation)

### Response Adjustment Function

Selectable FAST, MID or SLOW response to suit weighing environment conditions.

### ACAI – Automatic Counting Accuracy Improvement

For the counting function, the balance recalculates the average unit weight each time samples are added to eliminate errors caused by variations in unit weight.

### Built-in Rechargeable Battery *(FXi-09)*

An optional Ni-MH rechargeable battery pack can be fitted into the FZ-i/FX-i Series for use without AC power and for mobile applications (10 hours charging time for 8 hours operation)

***Large Breeze Break** (FXi-11)*

The small breeze break comes as standard with all the FZ-*i* models, FX-120*i*, FX-200*i*, FX-300*i* and FX-500*i*.

## Specifications

| | | FZ-120*i* / FX-120*i* | FZ-200*i* / FX-200*i* | FZ-300*i* / FX-300*i* | FZ-500*i* / FX-500*i* | FZ-1200*i* / FX-1200*i* | FZ-2000*i* / FX-2000*i* | FZ-3000*i* / FX-3000*i* | FZ-5000*i* / FX-5000*i* |
|---|---|---|---|---|---|---|---|---|---|
| Weighing capacity | | 122 g | 220 g | 320 g | 520 g | 1220 g | 2200 g | 3200 g | 5200 g |
| Minimum weighing value | | 0.001 g | | | | 0.01 g | | | |
| Counting mode | Minimum unit mass | 0.001 g | | | | 0.01 g | | | |
| | Number of samples | 5, 10, 25, 50 or 100 pieces | | | | | | | |
| Percent mode | Minimum 100% reference mass | 0.100 g | | | | 1.00 g | | | |
| | Minimum 100% display | 0.01 %, 0.1 %, 1 % (depends on the reference mass stored) | | | | | | | |
| Repeatability (Standard Deviation) | | 0.001 g | | | | 0.01 g | | | |
| Linearity | | ±0.002 g | | | | ±0.02 g | | | |
| Stabilization time (when set to FAST) | | Approx. 1 second | | | | | | | |
| Sensitivity drift (10°C to 30°C) | | ±2 ppm / °C | | | | | | | |
| Operating temperature | | 5 °C to 40 °C (41 °F to 104 °F), 85 %RH or less (no condensation) | | | | | | | |
| Display type | | Vacuum Fluorescent Display (VFD) | | | | | | | |
| Display refresh rate | | 5 times /second, 10 times /second or 20 times /second | | | | | | | |
| Standard serial interface | | RS-232C Interface | | | | | | | |
| Weighing pan (diameter) | | 130 mm | | | | 150 mm | | | |
| External calibration mass | | 100 g<br>50 g | 200 g<br>100 g<br>50 g | 300 g<br>200 g<br>100 g<br>50 g | 500 g<br>400 g<br>300 g<br>200 g<br>100 g<br>50 g | 1000 g<br>500 g | 2000 g<br>1000 g<br>500 g | 3000 g<br>2000 g<br>1000 g<br>500 g | 5000 g<br>4000 g<br>3000 g<br>2000 g<br>1000 g<br>500 g |
| AC adaptor | | Confirm that the adaptor type is correct for the local voltage and power receptacle | | | | | | | |
| Power consumption | | Approx. 11VA (supplied to the AC adaptor) | | | | | | | |
| External dimensions | | 193 (W) X 262.5 (D) X 85.5 (H) mm | | | | | | | |
| Net weight | | FZ-***i*** Approx. 3.0 kg / FX-***i*** Approx. 2.5 kg | | | | | | | |

## Options

**FX*i*-02*** Quick USB interface with cable
**FX*i*-08*** Ethernet interface with WinCT-Plus software
**FX*i*-09*** Built-in rechargeable battery
**FX*i*-10** Small breeze break
**FX*i*-11** Large breeze break
**FX*i*-12** Animal weighing pan (FZ,FX-1200*i* / 2000*i* / 3000*i* / 5000*i*)
**FX*i*-15** Carrying case

*** FX*i*-02, FX*i*-08 and FX*i*-09 cannot be used at the same time.**

## Accessories

**AD-1683** Static eliminator
**AD-1684** Electrostatic fieldmeter
**AD-1688** Weighing data logger
**AD-1689** Tweezers for calibration weight
**AD-8920A** Remote display
**AD-8922A** Remote controller
**AD-8121B** Compact printer
**AD-8526** Serial/Ethernet converter
**AD-8527** Quick USB adapter
**AX-USB-9P** Serial/USB converter
**AX-KO2466-200** RS-232C cable (9P-9P)
**AX-CARATPAN-W** Carat pan (silver, 2pcs)
**AX-CARATPAN-B** Carat pan (black, 2pcs)
**AX-FX*i*-31** Main unit cover (5pcs)

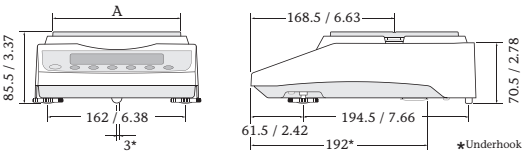
**AD-8121B**

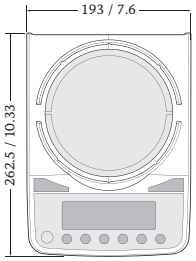
**AD-1688**

## External Dimensions (mm/inches)

**Pan size**

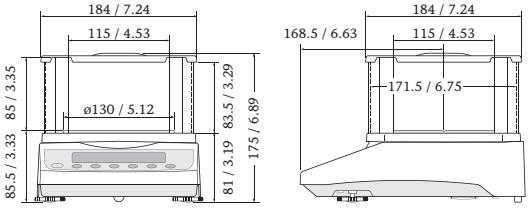
| Model | A |
|---|---|
| FZ,FX-120*i* / 200*i* / 300*i* / 500*i* | 130 / 5.12 |
| FZ,FX-1200*i* / 2000*i* / 3000*i* / 5000*i* | 150 / 5.91 |

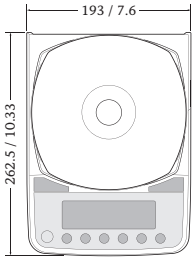


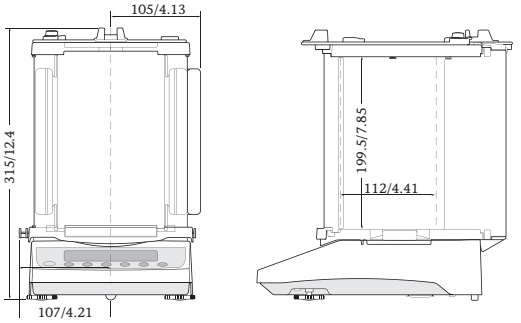

### Dimensions with Small Breeze Break (FX*i*-10)

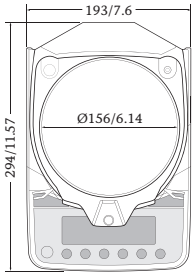
**(Comes equipped with FZ,FX-120*i*/200*i*/300*i*/500*i*, FZ-1200*i*/2000*i*/3000*i*/5000*i*)**




### Dimensions with Large Breeze Break (FX*i*-11)

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