

## Specifications

	FX-120i	FX-200i	FX-300i	FX-1200i	FX-2000i	FX-3000i
Sensing method	Compact Super Hybrid Sensor (SHS)					
Gram (g)	122x0.001	220x0.001	320x0.001	1220x0.01	2200x0.01	3200x0.01
Decimal Ounce (oz)	4.30x0.00005	7.76x0.00005	11.28x0.00005	43.0x0.0005	77.6x0.0005	112.8x0.0005
Pound (lb)	0.268x0.000005	0.485x0.000005	0.705x0.000005	2.68x0.00005	4.85x0.00005	7.05x0.00005
Pound / Ounce (L, oz)	0L4.30ozx0.01 oz	0L7.76ozx0.01 oz	0L11.29ozx0.01 oz	2L11.03ozx0.01 oz	4L13.60ozx0.01 oz	7L0.88ozx0.01 oz
Troy Ounce (ozt)	3.92x0.00005	7.07x0.00005	10.28x0.00005	39.2x0.0005	70.7x0.0005	102.8x0.0005
Carat (ct)	610x0.005	1100x0.005	1600x0.005	6100x0.05	11000x0.05	16000x0.05
Momme (mom)	32.2x0.0005	58.6x0.0005	85.3x0.0005	322x0.005	586x0.005	853x0.005
Pennyweight (dwt)	78.6x0.001	141.7x0.001	206.2x0.001	786x0.01	1417x0.01	2062x0.01
Grain (GN)	1882x0.02	3395x0.02	4938x0.02	18827x0.2	33951x0.2	49383x0.2
Tael (TL)	3.22x0.00005	5.82x0.00005	8.46x0.00005	32.2x0.0005	58.2x0.0005	84.6x0.0005
Tola (t)	10.4x0.0001	18.8x0.0001	27.4x0.0001	104x0.001	188x0.001	274x0.001
Messghal (MS)	26.0x0.0005	46.9x0.0005	68.2x0.0005	260x0.005	469x0.005	682x0.005
Counting Mode	Minimum unit mass	0.001g		0.01g		
	Number of samples	5, 10, 25, 50 or 100 pieces				
Percent Mode	Minimum 100% reference mass	0.100g		1.00g		
	Minimum 100% display	0.01%, 0.1%, 1% (depends on the reference mass stored)				
Repeatability (Standard Deviation)		0.001g		0.01g		
Linearity		±0.002g		±0.02g		
Stabilization time ( typically set at FAST)		Approx. 1 second				
Sensitivity drift (10°C to 30°C)		±2ppm /°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 )		130mm			150mm	
External calibration mass		100g 50g	200g 100g	300g 200g 100g	1000g 500g	2000g 1000g 3000g 2000g 1000g
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 84.5 (H) mm				
Net weight		Approx. 2.5kg				

## Options

- FXi-02\*** Quick USB interface with cable  
**FXi-08\*** Ethernet interface with WinCT-Plus software  
**FXi-09\*** Built-in rechargeable battery  
**FXi-10** Small breeze break  
**FXi-11** Large breeze break

\* FXi-02, FXi-08 and FXi-09 cannot be used at the same time.

## Accessories

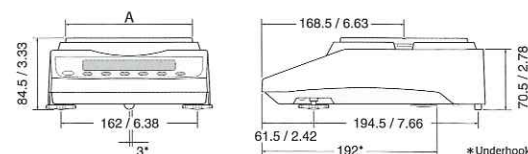
- AD-1683** Static eliminator  
**AD-8920** Remote display  
**AD-8922** Remote controller  
**AD-8121B** Compact Printer  
**AD-8526** RS/Ethernet converter



AD-8121B

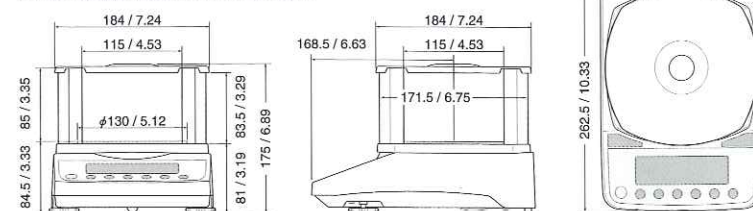
## External Dimensions (mm / inches)

Pan size	
Model	A
FX-120i / 200i / 300i	130 / 5.12
FX-1200i / 2000i / 3000i	150 / 5.91



## Dimensions with Small Breeze Break (FXi-10)

(Comes equipped with FX-120i / 200i / 300i)



**AND** ...Clearly a Better Value

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 MERCURY 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>  
 Große Straße 13 b 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.  
 Korp. 134A, D.29, UL. Vereiskaya, Moscow, 121357  
 RUSSIAN FEDERATION  
 Telephone: [7] (495) 221-5217 Fax: [7] (495) 983-3059

**FX-120i** 122gx0.001g   **FX-200i** 220gx0.001g   **FX-300i** 320gx0.001g   **FX-1200i** 1220gx0.01g   **FX-2000i** 2200gx0.01g   **FX-3000i** 3200gx0.01g



**AND** ...Clearly a Better Value  
 A&D Company, Limited  
<http://www.aandd.jp>

# Precision Balances

# FX-i

## Series





# Realizing Compact, Increasing Functions!

We have developed a Miniaturized SHS (Super Hybrid Sensor) to achieve a compact precision balance, which is 40% lighter and 47% smaller than our GF series with a 25% smaller footprint, while maintaining A&D's superior weighing functions.

## B5 size footprint

Ideal for installation and use in narrow spaces



## Compact SHS (Super Hybrid Sensor) – 1 second stabilization

Quick stabilization speed with accurate weighing for better productivity



## VFD – Vacuum Fluorescent Display

Large VFD for easy-to-read weighing results



## SCF – Statistical Calculation Function

Can display 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)



## Quick USB interface (FXi-02)

Easy-to-use optional USB interface, with no driver installation necessary, for transfer of weighing data to a computer (applicable OS – Windows 98 OSR2 or later)



## Standard RS-232C interface

Incorporates bi-directional communication with a PC, printer or other peripheral devices



## 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

```

A & D
MODEL FX-3001
S/N 01234567
ID ABCDEF6
DATE 2006/09/01
TIME 12:34:56
CALIBRATED(EXT.)
CAL. WEIGHT
+200.000 g
SIGNATURE
    
```



## Comparator function

Easy to compare weighing results by setting HI limit and LO limit to display HI,OK,LO indicator



## Buzzer function

A beeping sound to indicate HI, LO or OK can be selected for use with the comparator function



## Digital calibration function

Simple and easy to calibrate the balance with external calibration mass and possible to adjust the mass accuracy by  $\pm 50$  digits

## Built-in rechargeable battery (FXi-09)

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

## Multiple weighing units of measurement

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

## Response Indicator function

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



## 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 control and acquisition of data from multiple FX-i balances

WinCT-Plus



Provided by end-user

Ethernet Hub



Note: Ethernet Hub and cables must be provided by end-users



# FX-i



## Animal weighing function

The HOLD function enables freezing of weighing data for animal weighing applications and an ANIMAL indicator appears on the display



## ACAI – Automatic Counting Accuracy Improvement

This counting function recalculates the average unit weight each time a sample is added to eliminate errors cause by variations in unit weight



## Percent mode function

A sample can be registered as 100% and the weight of another sample can be compared as a percentage



## Underhook

The underhook, for hanging applications, allows for measurement of magnetic materials and density measurements in air and water



## Auto Power ON function

The weighing mode display activates automatically with AC power so there is no need to press the ON/OFF key



## Auto Power OFF function

The display switches OFF automatically when the balance is inactive for 10 minutes as a power-saving tool

## Capacity indicator function

Weight on the pan displayed as a percentage of full capacity

## Breeze breaks

Small and large breeze breaks are available to protect against wind for more accurate weighing. The small breeze break comes as standard with the FX-1201, FX-2001 and FX-3001 which are all 0.001g weighing resolution models

## EMC – Electromagnetic Compatibility

The FX-i meets EMC regulations and is immune to the effects of electromagnetic fields of up to 10V/m