Standard-Level Precision Balances

FZ-i/FX-i
Series

FZ-i

FX-i

Pay for What Matters—Reliable, Accurate Weighing

A&D
A&D Company, Ltd.

Discover Precision

High Performance and Functionality You Can Afford

Built on A&D's cutting-edge sensor technology, the FZ-i/FX-i series is a highly robust precision balance that delivers fast and accurate weighing without any frills, offering cost-effective solutions for a diverse array of applications.

Air-pump controlled internal calibration◆
(FZ-i models only)
◆ Patented

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 innovative 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)

You can ensure the accuracy of the balance with just one key press. No special skills are required. This is useful after you changed the location of the balance or when there was a fluctuation in environment, etc.

Compact footprint: 198 mm × 294 mm

By taking advantage of our Compact Super Hybrid Sensor (C-SHS) technology◆, A&D significantly reduced the size of a precision balance—25% smaller footprint than our conventional models, making it ideal for installation and use in confined spaces.

◆ Patented

High-speed weighing with 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 stabilization speed of **just 1 second** while maintaining extremely high span stability. The FZ-i/FX-i series will maximize your productivity and efficiency.

Guarded against accidental overloading◆

An internal shock absorber[1] protects the C-SHS from the adverse effects of vertical and transverse overloading. This is especially effective if the balance is embedded in an automated weighing system where actuator malfunctions are a possibility.

◆ Patented
∗1 Not designed to handle impact loads

RS-232C interface (standard)
Bi-directional communication is possible with a PC, printer or other peripheral devices.
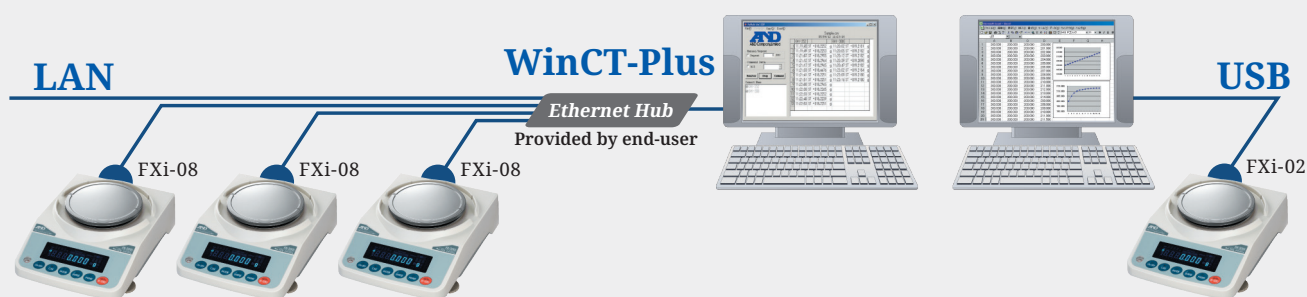
Quick USB interface (FXi-02)

The easy-to-use optional USB interface requires no driver or software installation for transfer of weighing data to a PC.*2

*2 Data transfer from the balance to a PC only. Please use the RS-232C standard interface with the serial/USB converter (AX-USB-9P, optional) for two-way communication or sending GLP or statistical calculation information via USB. Portable memory devices such as weighing environment logger (AD-1687) and data logger (AD-1688) are also available.

Ethernet interface (FXi-08) with WinCT-Plus software

You can send commands for controlling and acquiring data from multiple balances.

LAN   WinCT-Plus   USB

Ethernet Hub
Provided by end-user

FXi-08   FXi-08   FXi-08   FXi-02

Multiple units of measure

You can easily select from: g, oz, lb, lb-oz, ozt, ct, mom, dwt, gr, pcs (counting mode), % (percent mode) and a user-programmable unit for conversion applications. One additional unit from tl, tol, or N can be added upon request.

GLP/GMP/GCP/ISO compliant output

For documentation requirements, the balance can output its manufacturer, model, serial number, ID number, date + time*3, space for signature for calibration report, calibration test report, and title & end blocks for a series of weighing results.

*3 For the FZ-i models only. Please use the AD-8127 compact printer, which has a calendar function, to print the date and time with the FX-i models.

Statistical calculation function (SCF)

The balance can display and output statistical calculation data including number of data, sum, maximum, minimum, range (maximum–minimum), average, standard deviation, and coefficient of variation to facilitate the analysis of measurements.

Adjustable response characteristics and hold function

From three preset combinations of weighing speed and stability (FAST, MID, or SLOW), select the one that best suits your environmental conditions (drafts and vibrations). A hold function is also available for weighing animals.

Automatic counting accuracy improvement (ACAI)

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

Built-in rechargeable battery (FXi-09)

The Ni-MH rechargeable battery pack can be fitted into the balance for use without AC power (10 hours of charging for 8 hours of operation).

Large Breeze Break (FXi-11)

A small breeze break is provided as standard for all the FZ-i models, FX-120i, FX-200i and FX-300i.

Specifications

	FZ-120i / FX-120i	FZ-200i / FX-200i	FZ-300i / FX-300i	FZ-500i / FX-500i	FZ-1200i / FX-1200i	FZ-2000i / FX-2000i	FZ-3000i / FX-3000i	FZ-5000i / FX-5000i
Capacity	122 g	220 g	320 g	520 g	1220 g	2200 g	3200 g	5200 g
Readability	0.001 g				0.01 g			
Repeatability (standard deviation)	0.001 g				0.01 g			
Linearity	±0.002 g				±0.02 g			
Stabilization time (when set to FAST under a good environment)	Approx. 1 second							
Sensitivity drift	±2 ppm /°C (10 to 30 °C/50 to 86 °F)							
Operating environment	5 to 40 °C (41 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							
Units of measure*i	g (gram), oz (ounce), lb (pound), lb-oz (pound-ounce), ozt (troy ounce), ct (metric carat), mom (momme), dwt (pennyweight), gr (grain), pcs (counting mode), % (percent mode), and a user-programmable unit							
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			
% readability	0.01 %, 0.1 %, 1 % (depends on the reference mass stored)							
Standard interface	RS-232C							
Weighing pan size (diameter)	130 mm				150 mm			
Internal calibration	Air-pump controlled internal calibration (FZ-i models only)							
Applicable calibration weight value	100 g 50 g	200 g 100 g 50 g	300 g 200 g 100 g 50 g	500 g 400 g 300 g 200 g 100 g 50 g	1000 g 500 g	2000 g 1000 g 500 g	3000 g 2000 g 1000 g 500 g	5000 g 4000 g 3000 g 2000 g 1000 g 500 g
AC adapter	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) × 262.5 (D) × 85.5 (H) mm							
Net weight	FZ-i Approx. 3.0 kg / FX-i Approx. 2.5 kg							

*i One additional unit from tael (Singapore/HK jewelry/Taiwan/China), tola or Newton can be added upon request.

Options

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

FXi-11   Large breeze break
FXi-12   Animal weighing pan (for the 1200/2000/3000/5000 g capacity models only)
FXi-15   Carrying case

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

Accessories

AD-1683   Static eliminator
AD-1684A   Electrostatic fieldmeter
AD-1687   Weighing environment logger
AD-1688   Weighing data logger
AD-1689   Tweezers for calibration weight
AD-8920A   Remote display
AD-8922A   Remote controller
AD-8127   Compact printer

AD-8526   Serial/Ethernet converter
AD-8527   Quick USB adapter
AX-USB-9P   Serial/USB converter with cable
AX-KO2466-200 RS-232C cable (9P-9P)
AD-8529PC-W   Bluetooth converter for PC
AD-8529PR-W   Bluetooth converter for printer
AX-FXi-31   Main unit cover (5 pcs)

AD-1687

AD-1688

| Internal Calibration FZ-i | External Calibration FX-i | Super Hybrid Sensor | VFD Display | RS-232C Interface | GLP Compliant | Clock & Calendar FZ-i | Counting with ACAI | Percentage Function | Animal Weighing | Statistical Calculation |

| Comparator Function | Auto Power ON | Auto Power OFF | Underhook | EC Type Approval FZ-i | Software | | Optional | Quick USB | LAN-Ethernet Interface | Rechargeable Battery |

A&D Company, Ltd.

Discover Precision

*FZi/FXi-ADCC-08-PR8-19501GP