

*Waterproof Checkweighing Scales*

# *FS-i* Series

FS-6Ki  
FS-15Ki  
FS-30Ki  
FS-D



*High-speed Weighing!*  
*High-speed Judgment!*



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

# Why These Large and Bright Comparator Lights Guarantee You Maximum Productivity

Do you know how fast humans can process visual information? Research shows we usually need just a tiny fraction of second to tell one image from another. As the speed of check weighing is a critical requirement in today's food industry, A&D's FS-i Series takes full advantage of human visual ability by means of vivid tricolor lights, in addition to its ultra-fast, 0.5-second weighing performance.



## High-speed Weighing and Data Acquisition

Stabilization takes only 0.5 seconds, realizing extremely efficient weighing. This becomes even more significant when coupled with a refresh rate of 20 times/second, which allows fast data acquisition via the optional serial interface (FS-03i or FS-04i).

## Simple and Error-free Comparator Judgment

The highly distinct LED lights are an excellent guide for anyone to perform fast and adequate product packaging. The sound of the buzzer function can also aid in making correct judgments.

### **NEW!** Auto-tare Function

To save you from the burden of pressing the TARE key in consecutive measurements, the scale can perform tare automatically each time the weight reaches the target range.

### **NEW!** Negative Comparison

You can now compare negative values by removing weights from the scale.

## Take-away Check Weighing

By using the auto-tare and negative comparison functions together, it is possible to perform "take-away" check weighing. This is very convenient when measuring out the same amounts from a container.



Tare the initial weight (either manual or automatic).

Take out the content for the target weight.

The scale performs tare automatically and returns the display to zero.

Please also visit our video library at [www.aandd.jp](http://www.aandd.jp) to see it in action.

**USEFUL!**

## Large Memory for Comparator Settings

The scale stores up to 100 sets of comparator limits, which saves you a lot of trouble if you need to change the setting frequently.

## Error Prevention by Simplified Operation Mode

In simplified operation mode, operators are limited to the minimum required keys to avoid accidental changes to the scale settings. As with the comparator lights, this will ensure simple, efficient, and accurate work.

## Stainless Steel (SUS304) and IP65 Water & Dustproof Construction

The scale is easy to wash and keep hygienic. Its epoxy-coated load cell has also proven highly reliable under harsh environments.



## Analog Sweep Display for Intuitive Filling Control

A 60-segment horizontal bar graphically shows you the weight value in relation to the full capacity, target weight, or upper/lower limits.



Example of target weighing display mode

## Sealed Lead Acid Rechargeable Battery (Optional)

You can operate the scale with the optional rechargeable battery (up to approx. 80 hours) where an AC power supply is not present or when it is unstable.

## Serial Data and Comparator Relay Outputs (Optional)

RS-232C + relay (FS-03i) and RS-422/485 + relay (FS-04i) interfaces are available for outputting data to external devices or controlling multiple FS-i scales.

## Other Features

- ✓ LCD with backlight for better visibility in dark areas
- ✓ Easy numerical entry using the 10-key pad
- ✓ Pre-set tare function to deduct known tare weights
- ✓ Three weighing resolutions: 1/3,000, 1/6,000 (or 1/7,500), and 1/12,000 (or 1/15,000)\*
- ✓ Five units of weighing available (kg, g, lb, oz, and lb-oz)
- ✓ NSF-certified for sanitation in food industry
- ✓ Universal Flexi Coms (UFC) function, which enables free editing of printout format

\*Only one can be selected at a time.



## FS-D – Indicator for Check Weighing Scales

At last, the solution for those who liked the features and functions of the FS-i display unit but wanted to use a different scale platform. The FS-D, which comes with a desktop/wall-mount stand and a connector plug, can even be used with platforms other than A&D's. The eight preset capacities range from 6 kg (15 lb) to 1,500 kg (3,500 lb) and the three resolutions from 1/3,000 to 1/12,000 (or 1/15,000)\*.

\*Only one of each can be selected at a time.



SB-6K13SW  
(sold separately)

**Now Available!**

# Specifications

		FS-6Ki	FS-15Ki	FS-30Ki
kg	Capacity	6	15	30
	Min. display	0.0005 / 0.001 / 0.002*	0.001 / 0.002 / 0.005*	0.002 / 0.005 / 0.01*
g	Capacity	6000	15000	30000
	Min. display	0.5 / 1 / 2*	1 / 2 / 5*	2 / 5 / 10*
lb	Capacity	15	35	70
	Min. display	0.001 / 0.002 / 0.005*	0.002 / 0.005 / 0.01*	0.005 / 0.01 / 0.02*
oz	Capacity	240	560	1120
	Min. display	0.02 / 0.05 / 0.1*	0.05 / 0.1 / 0.2*	0.1 / 0.2 / 0.5*
lb-oz	Capacity	15	35	70
	Min. display	0.1	0.1	0.1
Repeatability (Std. deviation)		0.001 kg	0.002 kg	0.005 kg
Linearity		±0.002 kg	±0.005 kg	±0.01 kg
Sensitivity drift		±20 ppm / °C (5 °C to 35 °C / 41 °F to 95 °F)		
Display		7-segment LCD (Character height: 18.6 mm) with backlight 60-segment analog sweep (horizontal bar) display with backlight		
Display update		20 times / second		
Operating temperature		-10 °C to 40 °C / 14 °F to 104 °F, less than 85% R.H. (no condensation)		
Power supply		AC main (100 V to 240 V) or SLA rechargeable battery (option), approx. 80 hours (depends on usage)		
Weighing pan size		250 x 250 mm / 9.8 x 9.8 in		380 x 300 mm / 15.0 x 11.8 in
Dimensions		250 (W) x 414 (D) x 496 (H) mm 9.8 (W) x 16.3 (D) x 19.5 (H) in		380 (W) x 464 (D) x 496 (H) mm 15.0 (W) x 18.3 (D) x 19.5 (H) in
Mass (approximate)		8.1 kg / 17.9 lb		14.9 kg / 32.8 lb
Calibration weight		6 kg / 15 lb	15 kg / 30 lb	30 kg / 60 lb

\* Factory setting

		FS-D
Input sensitivity		0.2 µV / d (d: the smallest min. display of kg)
Input signal range		0 mV to 13 mV
Load cell excitation voltage		DC 5 V ± 5% (no remote sensing)
Load cell drive capacity		Up to four 350 Ω load cells
Temperature coefficient	Zero	±(0.2 µV ± 0.001% of zero adjustment voltage) / °C (typ.)
	Span	±0.001% / °C of reading (typ.)
Linearity		±0.01% of full scale
Dimensions		250 (W) x 202 (D) x 266 (H) mm 9.8 (W) x 8.0 (D) x 10.5 (H) in
Mass (approximate)		2.7 kg / 6.0 lb

# Options

**HC-02i** Sealed lead acid (SLA) rechargeable battery (6 V, 4 Ah)

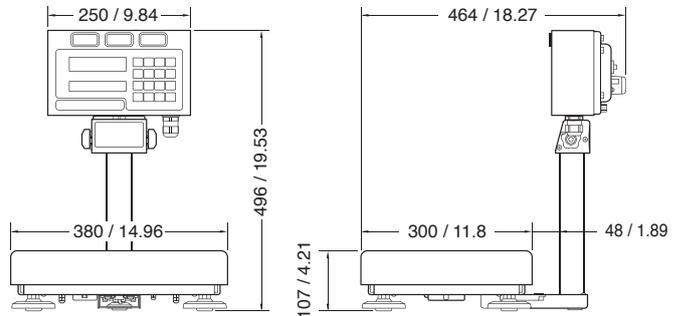
**FS-03i\*\*** RS-232C + comparator relay output

**FS-04i\*\*** RS-422 / 485 + comparator relay output

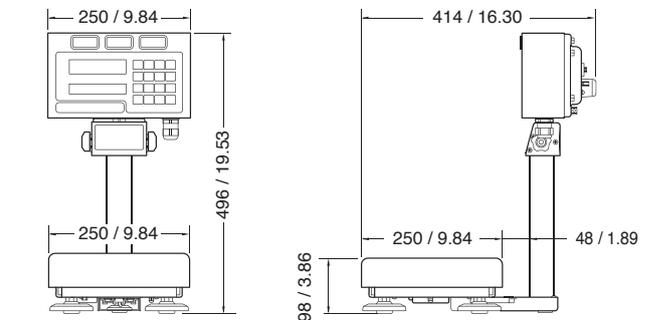
\*\* FS-03i and FS-04i cannot be used at the same time.

# External Dimensions (mm/inches)

## FS-30ki



## FS-6ki / FS-15ki



## 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 Australasia 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>

Hamburger Straße 30 D-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.

Vereyskaya str. 17, Moscow, 121357 RUSSIA  
Telephone: [7] (495) 937-33-44 Fax: [7] (495) 937-55-66

## A&D Instruments India Private Limited

509 Udyog Vihar Phase V  
Gurgaon-122 016, Haryana, INDIA  
Telephone: [91](124) 471-5555 Fax: [91](124) 471-5599