



# Advice to Price-sensitive Users Who Find Their Scales Unreliable

Your scale doesn't work when you really need it to. Don't you hate that? "You get what you pay for," they may have told you. But is that always true? With the EM Series from the No.1 scale maker in Japan, you can find the answer for yourself!

# Quick, accurate, and easy to use, and you can take it anywhere, anytime.

If you are OK with a poor-quality scale as long as it is the cheapest, the EM Series isn't your scale of choice. Or, if you are ready to pay whatever price for equipment with a beautiful exterior and countless numbers of fancy functions, the EM Series isn't for you, either. But if you need, on top of affordability, a solid, durable scale with just enough functions to ensure suitable weighing, you have found the right one. Here are 10 benefits that you can gain from the EM Series:

### 1. High Accuracy and Three Selectable Resolutions\*

You can select from three weighing resolutions (1/3,000, 1/6,000 to 1/7,500, or 1/12,000 to 1/15,000) the one that best suits your purpose and working environment.

\*Only one range can be selected at a time

### 2. Clearly Visible Display with White Backlight

The large, 26 mm characters are easy to read. The white backlight can aid visibility in dark areas.



**Backlight ON** 

# 3. Stable Field Operation Using a Rechargeable Battery

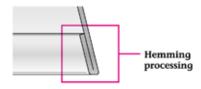
The scale operates without an AC power supply (for approx. 200 hours, with backlight off). Yes, the battery can be charged while the scale is in use.

# 4. Easy Carrying Thanks to Lightweight Body

The entire construction of the scale is trimmed in dimension to have only the necessary but sufficient level of strength. The resulting lightweight makes the scale highly portable, which is ideal if you change weighing location often.

# 5. Enhanced Safety by Hemming Processing on Weighing Pan

The rim of the weighing pan is folded inward so that you will not hurt your hands accidentally on a sharp edge. This is also beneficial for users who have to carry the scale around.



# 6. Hygienic, Stainless Steel Weighing Pan (SUS430)

The fact that the weighing pan is hemmed as well as made of stainless steel makes it easy to remove, wash, and wipe clean.

### 7. Auto Power Off As a Power Saving Function

With this function activated, the scale will turn off the display automatically after 5 minutes of inactivity to save the battery power.

# 8. 360-Degree<sup>\*</sup> Indicator to See the Display From the Side or Back

When the object you weigh is bulky and blocks the display, you can simply rotate the indicator and use the scale sideways. \*Cannot be rotated over 360\*



### 9. Convenient Counting Function to Calculate Quantities

The scale can count the number of objects of the same weight based on a predetermined unit weight. Useful for inventorying, incoming and outgoing inspections, etc.

### **10. Extendability with Various Accessories**

Lastly, we prepared and will prepare various accessories for those of you who would like to make your scale more versatile. Currently, the following are available:

- Display stand for desktop/wall-mount use
- Load cell extension cables for mounting the indicator at a distance
- Additional pole-support foot (for EM-30KAM/60KAM only) to increase stability
- Tilting indicator bracket for a wider viewable angle
- ✓ RS-232C interface to output the results to a PC, printer, etc.
- Easily attachable/detachable dust cover to keep the indicator clean



Desktop/wall-mount stand



Additional pole-support foot



Tilting indicator bracket

### Specifications

		EM-30KAM	EM-60KAM	EM-60KAL	EM-150KAL	EM-300KAX
Weighing capacity		30 kg	60 kg		150 kg	300 kg
Minimum weighing value (Selectable)		10 g*	20 g*		50 g*	100 g
		5 g	10 g		20 g	50 g
		2 g	5 g		10 g	20 g
Counting mode	Maximum count	30,000 pcs				
	Minimum unit weight	1 g	2 g		5 g	10 g
Repeatability (Standard deviation)		5 g	10 g		20 g	50 g
Linearity		±10 g	±20 g		±50 g	±100 g
Sensitivity drift		±0.01% / °C (5 °C to 35 °C)				
Display		7-segment LCD with backlight (Character height: 26 mm)				
Display refresh rate		Approximately 10 times per second				
Operating conditions		-10 °C to 40 °C, 85% R.H. or less (no condensation)				
Power supply		AC adapter or rechargeable battery				
Battery operation		Approximately 200 hours with backlight off				
Weighing pan size		300 x 350 mm		400 x 500 mm		500 x 600 mm
Dimensions		300 x 560 x 450 mm		400 x 710 x 750 mm		500 x 710 x 870 mm
Net weight		Approx. 4 kg		Approx. 7 kg	Approx. 9.5 kg	Approx. 17 kg
Calibration weight		30 kg	60	kg	150 kg	300 kg

#### **Options**

options				
EM-03**	RS-232C interface			
EM-12	Tilting indicator bracket			
EM-13**	Stabilizing foot (for EM-30/60KAM only)			
EM-14	Desktop/wall-mount stand			
EM-15	Dust cover			
EM-16	Load cell extension cable (3 m)			
EM-17	Load cell extension cable (5 m)			
★★ Factory installed option				

\* Factory setting

# "What a Strange-looking Scale!" Was My Colleagues' Typical First Reaction, but Once They Learnt the Secrets Behind Its Look...

### Development Story ~ How the EM Series was Born

Have you ever tried to change the mind of someone with fixed ideas? It's not always easy, is it? For me, developing the EM Series felt almost as if I had to persuade medieval people into believing the Earth revolved around the Sun. Let me explain.

Starting up the new scales project, we assumed two different but closely related missions. One was straightforward and cagerly upheld, saying, "let's make a new series of platform scales that can compete in the most competitive global markets." The other, while somewhat reserved, was more fundamental: "We must change our corporate culture and ways of thinking for this project to be successful." – Why?

First, allow me to brag a little about my company. A&D has a history of more than 30 years as a weighing instruments manufacturer. Our market share of platform scales in Japan surpasses 50%, and we have a great reputation for service, quality, and performance. We are proudly the top Japanese manufacturer in this field.

Outside Japan, however, A&D's scales are often considered too expensive. Overseas customers usually have better access to scales made locally and priced lower. As scales are almost commoditized these days, competing against local manufacturers is tough for us.

So what can we do to increase our presence in such competitive markets? Do we compromise the necessary quality to slash costs? – Of course not! After weeks of discussion, we arrived at one solution, which was surprisingly simple.

### Low-price scales that offer high utility values

Now, are you familiar with the term "Low-Cost Carriers?" These no-frills airlines provide minimum services but offer extremely affordable fares. Anything extra is optional and requires an additional fee. In short, we decided to apply a similar principle to our new scales. But saying is one thing, doing is quite another.

To cut frills from a product, the manufacturer has to know what is and what is not technically dispensable for practical purposes. Otherwise, the end result will be a dud that is low in both price and quality. As long as it carries the  $\Lambda$ &D brand on it, our scale must be authentic, no matter how low the price target may be. Please now take a look at the EM Series – such lean scales may make you exclaim "but they look so fragile!" Well, let me assure you. This is exactly where our know-how is used. We designed and verified through testing different framings for different weighing capacities so that each has adequate strength for its given use, without the slightest excess material. Can you guess what that means?

Apart from the lowered price, the greatest benefit is the simple fact that the scale is lightweight. The high portability of the scale makes it "sharable" by multiple users or places. We also "hemmed" (tucked in) the edge of the weighing pan to ensure safe handling. If you found the pan skirt shorter than conventional ones, this is why.

These unique features, coupled with the long-term durability, equally help reduce the total costs for your equipment.

#### The most difficult challenge

While experience is a valuable asset, it can take away from our flexibility. Many of our staff (notably managers) had firm ideas of how scales should be developed. These ideas were mostly based on their experience in Japan. It was high time to realize that each market has different needs and requirements. And the task of changing people's mentality proved much harder than product development itself.

Basically, we had to agree on three policies: (1) Don't push unwanted features on our target customers. (2) A speedy launch is more important than trying to satisfy everyone. (3) The development should not be limited by our past data or knowledge.

We even looked for suppliers among those who never produced components for scales but had high technical capabilities. We taught them our know-how and they responded with quality products at low prices. Such efforts having paid off, we managed to complete development in just about a year – less than half the period we would normally have taken.

So here it is. We are delivering to you the fruit of our technology, passion, and hope. You really owe it to yourself to give it a try!

