

Series:	PSB	DJ-SA	DJ-SB	PSE 30/45	PSE 75-300	DJ-KL	TC-KL	TC-K (A)	TC-KSB
<b>Short Description / Recommended for</b>	Cheap platform scale for occasional use with big plateframe. Mostly used as parcel scale, also suitable for weighing persons.	Cheap platform scale for occasional use with smaller plateframe, suitable for mobile use case.	Cheap bluetooth platform scale for occasional use. With big plateframe. Mostly used as parcel scale also suitable for weighing persons.	Compact and very accurate. Perfect for all shipment cases between a normal letter and medium size shipments.	More accurate and more reliable than PSB for similar use case. Works independently of the ground (also on carpet or construction sites with uneven ground)	Same plateframe as PSE, equipped with a more accurate load cell. Comes with a stand for the display and bluetooth interface.	Same plateframe as PSE, equipped with a more accurate and much more reliable load cell. Often used as parcel scale for larger mail order companies.	Robust platform scale with 50 * 40 cm weighing surface & RS232, for many industrial or logistic applications.	Waterproof Scale with 40 * 50 cm surface, stainless steel. Mostly used in food industry.
<b>Available with a readout of:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>	<b>Up to the capacity:</b>
1g				10kg		30kg	30kg	60kg – 200kg	
2g				30kg		60kg	60kg		
5g	5kg	5kg		45kg	25kg	150kg	120kg	100kg	
10g	10kg	10kg	10kg		75kg	300kg		300kg	
20g	75kg	100kg	75kg		200kg			300kg	60kg
50g	150kg	200kg	150kg		300kg			300kg	150kg
100g	300kg		300kg					600kg	300kg
<b>TARA Function</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Counting Function</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>RS232</b>	-	-	-	-	-	-	-	✓	-
<b>Bluetooth</b>	-	✓	-	-	-	✓	-	✓	-
<b>External Adjustment *</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Usable on soft or uneven ground</b>	-	-	-	-	✓	✓	✓	✓	✓
<b>Waterproof **</b>	-	-	-	-	-	-	-	-	✓ (IP67)
<b>Weighing plate</b>	400 * 400 cm	250 * 250 mm	400 * 400 mm	300 * 220 mm	380 * 320 mm	380 * 320 mm	380 * 320 mm	500 * 400 mm	500 * 400 mm
<b>Display ***</b>	LCD	LED	LED	LCD	LCD	LED	LCD	LCD	LED
<b>Energy supply: Cable</b>	AC adapter	AC adapter	AC adapter	AC adapter	AC adapter	AC adapter	AC adapter	230V power connection (IEC plug)	AC adapter
<b>Energy supply Battery</b>	4 * AA	4 * AA	4 * AA	4 * AA	4 * AA	4 * AA	4 * AA	Internal 4,5Ah Battery (rechargeable)	Internal 4,5Ah Battery (rechargeable)
<b>Weight units</b>	Kg, lb	Kg, lb	Kg, lb	Kg, lb	Kg, lb	Kg, lb	Kg, lb	Kg, lb	Kg, lb
<b>Measuring system / load cell</b>	4 x Strain gauge load cells ( one in each foot )	4 x Strain gauge load cells ( one in each foot )	4 x Strain gauge load cells ( one in each foot )	1 x corner load compensated strain gauge load cell	1 x corner load compensated strain gauge load cell	1 x corner load compensated strain gauge load cell	1 x corner load compensated strain gauge load cell	1 x corner load compensated strain gauge load cell	1 x corner load compensated strain gauge load cell
<b>recommended up to X weighings per day / approx. life time ****</b>	10 10.000	10 10.000	10 10.000	100 100.000	100 100.000	100 100.000	1.000.000	1.000.000	1.000.000

#### \* External adjustment (Calibration)

Each scale is adjusted before shipment and comes ready to use. If you would like to perfectly adapt the balance to the local environmental conditions at the place of use, or if the balance once lost its accuracy, the balance can be adjusted with a suitable weight. The weight is given by the scale, a for example PSB150 needs a 100kg weight with a tolerance smaller than the scales readout (less than 50g). If you do not have a suitable reference weight (which, of course, applies to 99.9% of our customers), you can have the scale adjusted by many independent scale service providers, borrow weights there or send us the scale for a new adjustment.

#### \*\* Waterproof / IP protection class (NEMA)

The plateframe of all this scales (also the versions without IP67) is shaped in a way that a small amount of liquid or dirt can run down the platform without damage and drip onto the floor without immediately reaching the inside of the scale. For large and permanent amounts of liquid, dust or dirt, the scales are not designed. Even without direct contact of moisture, a permanently high humidity it can lead to oxidation of the contacts between the platform and the display (which leads to wrong measurement results due to an incorrect signal transfer) or at other important electronic components, especially the displays are NOT sealed. If a permanent use is planned in the damp room or if the complete balance is going to be wet, also during cleaning (which of course has to be done after the processing of perishable food with the scale), only the TC-KSB series is recommended (made of stainless steel and waterproof to IP67, could be used in 1 meter deep water).

#### \*\*\* LCD vs. LED

At the most indoor conditions, both displays can be read equally good. In very bright light (for example outside in direct sunlight), an LCD Display can offer a better visibility due to a higher contrast of black digits on a bright background. But: LCD displays have proven to be much more fragile than LED displays. Especially if there is a risk that the display is going to fall down or that something will fall on the display, an LED is the better choice.

#### \*\*\*\* Recommended up to X weighings per day / approx. life time in weighings

A strain gauge load cell consists of a metal block that deforms under load, similar to a spring that is loaded. Strain gauge sensors attached to this block measure the amount of deformation, by which the weight is calculated. The larger and more stable, as well as the higher the material quality used, the more often the load cell can be deformed without "lending out". If this happens, the load cell may start to bend too much and will return inaccurate results.

Deviation of a single load cell caused by normal wear, or a linear deviation at all 4 load cells in scales like the PSB, can be eliminated very easily by a new adjustment.

The named amount of weighings are based on empirical values and include a rather big safety area, the numbers mentioned will be reached by all scales that are properly used at normal conditions. The actual durability depends on many other factors (eg: Is the load is always carefully placed or dropped hard).

In scales such as the PSB or DJ-SA, 4 small load cells are installed (one in every corner). The calculated weight is the combined signal of all 4 load cells. If a scale is capable to weigh 100kg, each load cell only needs to handle 25kg, which allows a much lower construction height with a large plateframe and a small price. But this smaller load cells may be affected by a faster "wear" than a single, large and stable load cell that is installed in the center of the platform, capable to carry 100kg alone. This is especially true if the load is not placed centered (and spread equally to all load cells) but if the load is often placed on the front edge. The two front load cells must carry more load than the two loadcells at the rear of the plateframe, which leads to uneven wear. If then a weight is placed in front of the platform, a different weight might be displayed than at the rear. However, this problem can of course be avoided if the scale is always loaded as centrally as possible. When this is considered also a cheap PSB can reach a much longer service live.