

# Quartzell<sup>TM</sup> technology provides extreme accuracy down to 10 mg piece weight

# Precision parts counting

# **Avery Weigh-Tronix**

The ZK830 combines exceptional accuracy, reliability and robustness in a single design. Programed with multiple applications, the ZK830 can maximise operator efficiency in many different industrial environments, from counting and checkweighing to general high resolution weighing tasks.

From micro components to larger items, the ZK830's high precision Quartzell transducer weighs with an accuracy not seen in other weighing scales in its class.

Miniscule weight changes are detected by the ZK830's 1 billion internal count resolution. The unique base provides 1100% overload protection, providing reliable, high accuracy and repeatability even in extreme working conditions.

A robust, die-cast clamshell base enclosure guarantees the ZK830's accuracy, providing robust protection for the internally mounted precision Quartzell transducer.

An intelligent spring breakaway mechanism provides shock and side load protection that cushions the internal weighing system from the daily wear and tear of typical industrial weighing environments.

The ZK830 is available with a wide range of capacities from 500g to 80kg (1 lb to 175 lb) - meeting most application requirements. A high precision scale offering 100,000 divisions (non legal-for-trade) or 10,000 divisions NTEP, OIML and Measurement Canada legal for trade is available.



**80 kg (175 lb) Model** 305 mm x 355 mm (12 in x 14 in) platter



**35 kg (70 lb) Model** 230 mm x 305 mm (9 in x 12 in) platter



**5 kg (10 lb) and 1 kg (2 lb) Models** 150 mm (6 in) round platter

# Precision digital counting scale

As industries increasingly move to lean, efficient operations, reduce inventory and work closer to a just in time manufacturing process and when customer satisfaction and profitability depend on accurate supply, component count accuracy becomes more critical to operations.

With its digital Quartzell transducer, the ZK830 can bring full control of stock quantity. Conventional analogue loadcells cannot offer the same level of precision as the Quartzell.

The ZK830 has been designed to accurately count small components from a minimum of 10 mg with an accuracy greater than 99.75%. By utilising its 1 billion internal count resolution, the ZK830 can calculate accurate piece weight down to 10 decimal places.

Created to adapt to most inventory control processes, the ZK830 can count and sample components quickly and accurately in a number of different ways, from simple one key press bulk sampling to a two key press dribble sampling process requiring minimal operator training.

The ZK830 has also been designed to speed up sampling processes, whether used in positive or negative sampling routines. For negative sampling, sample parts can be taken directly from a larger batch already on the scale, making the process less time consuming.

#### **Enhanced functionality**

Installing an easy-fit numeric keypad module to the side of the indicator boosts the ZK830's functionality, giving the operator flexibility to select from up to 40 stored piece weights and tare weights, ideal for harder to count components. Data can be easily recalled through the keypad or by use of a barcode scanner.

This optional keypad allows a second analogue or digital remote base to be connected to the system, allowing the operator to weigh a greater range of items.

The base switching option helps to obtain the best possible accuracy, by allowing items to be sampled on a smaller capacity base, while the batch counting takes place on a larger capacity base. Base switching can be selected manually, but for optimum speed, it can also be programed to occur automatically.

#### Data control

In addition to the capacity for storing up to 40 piece weights internally, the ZK830 can also link with external PC controlled databases, using simple SMA commands to import and export data from other sources.

#### **Count accumulator**

Ideal for use when counting large quantities of the same part, to keep a running total.

#### **Check counting**

Designed to make repetitive counting faster and more efficient, this function gives an easily visible under, over or accept window to alert the operator when the required number of parts is reached. Ideal for most packing operations.

## **Portability**

Fold-able carrying handles allow the scale to be easily moved between different counting tasks. An optional clamp down plate can be used with a battery power pack to mount the ZK830 onto a mobile cart, making item picking in a large warehouse easy and more efficient.



# Simple but effective

Created with the user in mind, the ZK830's easy-to-use six key indicator has been designed to keep operator training to the minimum and to speed up the weighing process. The ZK830's firmware uses proven easy-to-use sampling routings, which help speed up throughput while reducing operator fatigue.

Mounted to the front of the BSQ base, the indicator can easily be removed from the base unit for desk or wall mounting.

A low power IBN display and energy saving transducer make this scale ideal for use in all types of bright or low lit areas, or in applications where battery power is required.



# Tailored solution

The ZK830 offers a wide range of connectivity options, allowing many different devices to be linked to the scale, including PCs, printers, scanners, remote displays, stack lights and second remote bases.



*Quartzell*"

The rugged, reliable Quartzell transducer uses two, highly-accurate double-ended tuningfork quartz crystal sensors. The resulting digital

frequency greatly reduces weight conversion errors while increasing speed and accuracy. Because each cell uses two quartz crystals, the Quartzell transducer eliminates external influences such as temperature and pressure.



# Easy, efficient checkweighing

With its clear and easy to set up under, over and accept weight bands, the ZK830 has been created with the operator in mind.

The ZK830 can quickly display weight within an accepted band at a glance, for a fast and efficient checkweighing process.

The ZK830 offers a wide range of connectivity options, allowing the scale to be linked to most PCs and printers. This makes production data capture for analysis effortless and enables production lines to be fine tuned to maximise output.

Designed with prominent under, over and accept bands, the operator can quickly and easily identify when the required weight has been reached: ideal when repetitive checkweighing is required.

When fitted with a remote keypad, the ZK830 can store up to 40 individual PLU target bands along with any required tare weights.

#### Flexible connections

With a full range of ports, this high resolution checkweigher can be connected to a wide range of devices from PCs and printers, to scanners, remote displays and external light stacks, making data capture easy.

#### **Ball top option**



# High precision, robust base scale

This rugged industrial base scale has been designed to give outstanding high resolution weighing accuracy, even when used in some of the harshest industrial environments.

Designed to work in industrial working areas where other balances can't function, the ZK830 combines the strength, accuracy and reliability of our renowned BSQ bench base range with a user-friendly indicator.

The ZK830's impressive 100,000 division resolution can be increased by a factor of 10 with its high resolution function: ideal for tasks that require increased resolution.

A high resolution general weighing application simplifies the operator functionality when in gross or net weighing mode. When fitted with a remote keypad, up to 40 stored tares can be held within the scale for fast and efficient weighing tasks.

Additional software functionality can be activated by the supervisor to enhance the functionality of the ZK830, including a

transaction counter, accumulator and percentage weighing.

#### **Digital precision**

The Quartzell's digital signal allows the scale to weigh faster and with greater resolution than standard load cells. Small and large items can be weighed on a single base, allowing one scale to do a job that might previously have required several. With a fast return to zero between readings, the ZK830 provides speed and repetitive accuracy that can be vital in situations where highly accurate weight readings are required.





# Flexible Options

The ZK830's robust design, connectivity options and flexibility make it suitable for use in a wide range of environments including shipping areas, warehouses and production lines.

### STANDARD CONNECTIVITY

#### **OPTIONAL CONNECTIVITY**



# Additional Options

- Remote keypad (required for PLU storage or when a remote base is installed)
- Draft shield option (up to 10 lb/5kg only)
- Under hook option (up to 10 lb/5kg only)
- Battery options

- > Clamp down plate
- Ball top (12" x 14" / 305 x 350mm option only)
- › Remote base analogue card
- Wireless card
- Printer
- Barcode scanner
- Stack lights

# **Avery Weigh-Tronix**

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company

