



High resolution  
checkweighing with  
PLU data storage

*Technical Specification*

ZK840 9" x 12" (230 x 305 mm)  
programmable indicator

## DESCRIPTION

Ideal for high accuracy, quality control checkweighing applications. Quickly identify if very small components are missing from a prepackaged item or identify minute changes in process which could affect production on a fast moving line.

With its QA messaging option, the ZK840 can be set to request quality checks to be carried out at any point in the process. Data can be stored internally for retrieval at a later point in time or automatically transferred to a computer for further QA analysis.

Designed to fully utilize the high accuracy, 1 billion internal count resolution of the ZK840 and the strength of the BSQ base with its 1100% overload protection, the ZK840 also offers the flexibility of a full graphical touch screen display. This easy to use display allows a wide range of data to be shown, giving the operator a clear understanding of the product being checked.

Designed for fast repetitive weighing, the ZK840 checkweighing application offers a wide range of supervisor controlled functions to help simplify most checkweighing processes. The easy to set up and read under, over and accept bands help to aid the operator in a fast moving process and also offer more detailed statistical data packages for better control of product line efficiencies.

### Database PLU storage

Ideal for storing a wide range of target weights, upper and lower tolerance bands, tare weights, product descriptions and part numbers to allow both positive or negative checkweighing processes to be set up easily.

This fully configurable, programmable ZK840 checkweighing package offers full flexibility to work within most production line processes.

### Average checkweighing

Designed to quickly identify product line changes to show at a glance how close the line or operator is working to the predefined target and tolerances previously set. This quickly helps to identify small line changes or areas where efficiencies can easily be made.

Basic pack runs and transaction counters offer an easy indication of exactly where in the batch quantity the operator is, to avoid any unwanted over running of a set order quantity. Due to the graphical nature of the ZK840 display, this field can be easily displayed alongside other displayed data, if required.

## CHECKWEIGHING APPLICATION

|                        |  |
|------------------------|--|
| <b>Application</b>     | To be downloaded/installed via Ethernet or USB memory stick from Ztools library by a fully trained technician  |
| <b>Display Screens</b> | Display screens have been designed to be simple and easy to see. These can be as simple as just the under and over and accept bars or multi-screen data areas ( <i>subject to the data being turned on</i> ) |



Checkweighing screen showing under weight



Checkweighing screen showing accept weight + PLU Database



Checkweighing screen showing over weight



Average checkweighing screen

|                                  |   |
|----------------------------------|---|
| <b>Visual Display Aids</b>       | Under over and accept can be set to graphically show actual weight position based on the accept band<br>Average checkweighing run rate shows the difference between the preset target and the running average target              |
| <b>Operational Keys</b>          | Subject to configuration, basic keys being: Zero, Tare, Target, Print/ Select<br>Advanced keys: upper limit, lower limit, PLU, operator ID. Clear/ Setup key  |
| <b>Tare Weight</b>               | Can be easily set to work as target weight with tolerances, or as upper and lower limits with no target weight.<br>Target weights and tolerance can easily be set through the front panel or stored under within the PLU database |
| <b>Checkweighing Method</b>      | Positive or reverse checkweighing options are available ( <i>reverse checkweighing can also be set with auto tare if required</i> )   |
| <b>Max Stored PLUs</b>           | Will hold around 1000 typical PLUs internally, or around 3500 PLUs if installed with a Micro SD card. However turning on data fields other than the standard ones will reduce the amount of internal PLU storage space            |
| <b>Stored Data Fields</b>        | Part number - Alphanumeric (20 characters)<br>Description - Alphanumeric<br>Target weight<br>Lower tolerance<br>Higher tolerance<br>Lower limit<br>Upper limit<br>Tare weight   |
| <b>Statistical Data Packages</b> | Average checkweighing with graphical, display, X bar, standard deviation  |
| <b>Tare Entry</b>                | Push button tare, manually entered tare, or pre-stored tare found within the PLU database   |
| <b>Configurable Features</b>     | Basic pack runs, transaction counter, average checkweighing   |
| <b>Base Sizes and Capacities</b> | Three base sizes ranging from 2lb to 175 lb or 1kg to 80kg ( <i>please refer to our ZK840 counting data sheet</i> )   |
| <b>Legal for Trade</b>           | 10,000 d single or multi-interval down rangeable ( <i>each with three ranges of 10,000 d</i> )  |

|                            |   |
|----------------------------|---|
| <b>Non Legal for Trade</b> | 100,000 d single or multi-interval <i>(down rangeable based on current ZK840 capacity offerings)</i>  |
| <b>Readability</b>         | 3.5 million divisions   |
| <b>Digital Filters</b>     | Harmonizer filtering with adaptable constant filtering  |
| <b>Update Rate</b>         | 100 Hz  |
| <b>Indicator Display</b>   | Touch screen with protective screen cover. Display type is an Improved Super Twisted Nematic (ISTN) Graphic Display: the green illuminated with black background 320 x 160 pixel display provides wide viewing angles and high brightness. Operator messaging, user prompts and graphics can be displayed on screen. A mode selection allows the image to be displayed in reverse image for applications that would benefit from dark characters with a clear/light contrasted background |



|                      |   |
|----------------------|---|
| <b>Operator Keys</b> | ZK840 uses a touch screen display with six metal domed keys with audible feedback <i>(sample, tare, zero, setup, two custom keys)</i> |
|----------------------|---|

## INPUT/OUTPUT

|                              |  |
|------------------------------|--|
| <b>Remote Inputs</b>         | Three TTL or voltage free logic level inputs can be received for basic key functions or application program events   |
| <b>Standard Outputs</b>      | Three outputs can be used for system variable set points or in combination with application program events   |
| <b>Serial Ports</b>          | <p>(2) Two serial ports:</p> <ul style="list-style-type: none"> <li>› Comm 1 RS232 full duplex with hand shake</li> <li>› Comm 2 RS232 full duplex</li> </ul> <p>Manual and Auto print function<br/>Printer and scanner can share one RS232 port, with a custom application</p> <ul style="list-style-type: none"> <li>› Supports SMA, ENQ and NCI command response protocols and broadcast</li> <li>› Supports BSQ digital bench bases</li> <li>› Supports external expansion box for allowing other external option cards</li> </ul> |
| <b>USB/VCP (Device)</b>      | PC Connection <i>(uses one of the RS232 ports)</i>   |
| <b>USB Host</b>              | <p>(2) Two USB Host ports <i>(found on the side of the indicator)</i> can be used for:</p> <ul style="list-style-type: none"> <li>› USB flash memory</li> <li>› Remote USB keyboard</li> <li>› Scanner</li> <li>› Printer</li> </ul>   |
| <b>Ethernet</b>              | The Ethernet port can be configured to support ten independent devices. It supports DHCP, UDP Sockets, TCP/IP (client or server), embedded web server, email, SMA, NCI, FTP, ENQ and Broadcast. Fieldbus Ethernet/IP™ and Modbus-TCP   |
| <b>Expanded Memory</b>       | Internal expanded data storage can hold up to 4GB extra storage data , ZK840 has one Micro SD slot that is compatible with most Micro SD cards from 4GB to 32GB  |
| <b>Options and Approvals</b> | For full list of options please refer to the main ZK840 counting specification sheet <i>(AWT35-501705)</i>   |
| <b>Embedded Web Server</b>   | Designed to allow the ZK840 to serve up web pages to a web browser for easy access of data and control from other PC, tablet or mobile date devices  |

**Application Platform**

This application program has been specially designed to work on both the ZK840 bench scale and our ZM615 weight indicator



**Avery Weigh-Tronix**

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