

High resolution
grading system with
PLU data storage

Technical Specification



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

DESCRIPTION

Positive and reverse grading

Ideal for high throughput grading applications where items or produce are graded into different weight bands. This quality control grading system helps the operator quickly segregate items by weight while also keeping track of quantities and weight totals for each grade location.

If graded items are being packed by set quantity per box, the scale can quickly identify when a box is full and can inform the operator to replace the box, trigger a set point to divert parts to the next empty box or allow labels to be printed for the full graded box.

This grading system can control up to 10 grading points per PLU. Each PLU can be stored inside the ZK840 internal database and can hold up to 3500 grading PLUs, including pre-defined box quantity

- › PLU fields
- › Product description
- › Grade point description 1 to 10
- › 1 to 10 weight bands
- › Predefined box quantities

Running totals

At the end of each batch or shift the complete running total can be calculated, showing total counted items per grade along with total weight per grade and percentage per grade based on the total throughput over a given time period.

Reverse grading option

Designed to reduce component handling and speed up throughput by weighing each item as it is removed from the full box of products that is already on the scale.

GRADING APPLICATION

Application	To be downloaded/installed via Ethernet or USB memory stick from Ztools library by a fully trained technician
Display Screens	Display screens have been designed to be simple and easy to see



Visual Display Aids	Grade band levels per grade box, total units counted, last weight, live weight and grade recorder. Visual representation of each grade will inform operator when graded box is full.
Operational Keys	Subject to configuration, basic keys being: zero, tare, print, select, totals and reject, setup
Grading Method	Positive or reverse grading options are available
Max Stored PLUs	Will hold around 1000 typical grading 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
Stored Data Fields	Part number - Alphanumeric (20 characters) Grading Description –Alphanumeric 1 to 10 1 to 10 Grading weight point (start of each band) Predefined box quantities (if set)
Recorded Data	Percentages per band per pack run, total throughput in items, total weight per band, total number of boxes per band
Base Sizes and Capacities	(3) Three base sizes ranging from 2lb to 175 lb or 1kg to 80kg (please refer to our ZK840 counting data sheet)
Legal for Trade	10,000 d single or multi-interval (down rangeable based on current ZK840 capacity offerings)
Non Legal for Trade	100,000 d single or multi-interval (down rangeable based on current ZK840 capacity offerings)

Readability	3.5 million divisions
Digital Filters	Harmonizer filtering with adaptable constant filtering
Update Rate	100 Hz
Indicator Display	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.



Operator Keys	ZK840 uses a touch screen display with six metal domed keys with audible feedback (sample, tare, zero, setup, two custom keys)
INPUT/OUTPUT	
Remote Inputs	Three TTL or voltage free logic level inputs can be received for basic key functions or application program events
Standard Outputs	Three outputs can be used for system variable set points or in combination with application program events
Serial Ports	<p>(2) Two serial ports:</p> <ul style="list-style-type: none"> › Comm 1 RS232 full duplex with handshake › Comm 2 RS232 full duplex <p>Manual and Auto print function Printer and scanner can share one RS232 port, with a custom application</p> <ul style="list-style-type: none"> › Supports SMA, ENQ and NCI command response protocols and broadcast › Supports BSQ digital bench bases › Supports external expansion box for allowing other external expansion card options
USB /VCP (Device)	PC Connection (uses one of the RS232 ports)
USB Host	<p>(2) Two USB Host ports (found on the side of the indicator) can be used for:</p> <ul style="list-style-type: none"> › USB flash memory › Remote USB keyboard › Scanner › Printer
Ethernet	<p>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</p>
Expanded Memory	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
Options and Approvals	For full list of options please refer to the main ZK840 counting specification sheet (AWT35-501705)

Embedded Web Server	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 data devices
Application Platform	This application program has been specially designed to work on both the ZK840 bench scale and our ZM615 weight indicator



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