Avery Weigh-Tronix

ZK840

COUNTING SCALE

ZK840 6" (150mm) round platter with draft shield

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

ZK840 12" x 14" (305 mm x 350 mm) with column and stack light

Fully programmable parts counter with built-in inventory control

Technical Specification

DESCRIPTION

The ZK840 is a touch-screen fully programmable, high resolution Quartzell™ digital bench scale. Out of the box, this high precision scale is pre-programmed to be a dedicated high resolution parts counter with a built-in inventory control, holding up to 3500 parts data from part numbers, descriptions, piece weights, tare weights to stock on hand. A wide range of dedicated or customized applications, from counting, checkweighing, recipe filling, grading to general balance applications can also be installed.

The ZK840 is designed to work within most inventory management applications and allow a wide range of stored data to be accessed quickly.

World Class Count Accuracy

This highly accurate digital parts counter provides count accuracy of over 99.75% for parts weighing, from as little as 10 mg through to much heavier items.

The unique modular base and indicator combination uses our robust BSQ Quartzell bench base with up to 1 billion internal count resolution and 1100% overload protection.

Main Counting Features

Fast, reliable and extremely accurate, the ZK840 has been specially designed to give simple operator messaging to aid the operator when using the scale.

This can also be customized to allow other special messaging prompts or quality control procedures to take place.

Fitted with time saving sampling routines and configurable counting features, the ZK840 can easily be adapted to meet most customer applications.

- Check counting
- Reverse sampling
- Auto-zeroing on sample
- Count accumulation

Fitted with a vast range of connectivity the ZK840 can connect to a wide range of peripheral devises, including external PC databases, USB keyboards, external memory drives, printers, scanners, stack lights, remote displays and multiple platforms.

ZK840 COUNTING *Technical Specification*

OPERATING APPLICATIONS

Counting Application	Easy-to-use sampling routines including a one key press bulk process, to a two key press dribble sampling routine where the sample key is pressed once all sample parts are on the scale *(dribble is the default mode)* Scale can perform both positive and negative sampling, also if zero on sampling is required this option can be turned on Selectable options: › Check counting › Count accumulation › Dynamic filtering › Database › Auto base switching
Display Screens	Display screens have been designed to simplify processes with step by step prompts

Default Counting Screen

Optional Display Screen

Full Database Screen

Check Counting Screen

SUPERVISOR CONTROLLED KEY ADVANCED SETTINGS

Database Storage	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. External database can be used to allow multiple scales to easily communicate with a centrally stored database
Database Fields	Database fields are fully customizable using Ztools to allow a wider range of data to be stored and recall main data fields being: › Part number - Alphanumeric (20 characters) › Description - Alphanumeric 40 characters long, one to three lines › Lot /location › Piece weight › Tare weight local base › Tare weight for second remote base › Stock on hand › Upper and lower check count limits
Security Control	Database is password protected to limit access and control by the operator
Count Accumulation	Designed to quickly total all counted items that have been processed or counted on the scale so lower capacities of the scale can be used
Inventory Control	Enables counted parts to be easily taken in or out of the stock on hand

Auto Base Switching	Allows the supervisor to select which base they want to use for sampling when a second base is installed
Required Sampling Routine	Bulk or dribble sampling *(default setting is dribble)*
Minimum Sample Size	Limits the sample size that can be entered in the scale
Required Accuracy	Allows supervisor to set the required scale accuracy subject to the environment and components being weighed *(99.5% to off)*
Minimum Sample Weight	Limits the operator on the minimum sample weight they can use to get an accurate piece weight *(turning this function off reduces the probability of achieving the required accuracy)*
Auto Component Latching	Ideal when weighing extremely light components to help stabilize the weight reading after counting
Programming Language	Avery Weigh-Tronix Lua
Base Compatibility	Supplied connected to one BSQ base as standard *(local base)*
Max Number of Bases Allowed	Five *(one local BSQ base, two remote BSQ and two analog platforms)*. Can link to a second and third BSQ by utilizing each RS232 port Can also link to two analog remote bases by installing two optional 5 VDC excitation analog base cards within the ZK840 indicator *(each analog card can run up to six 360 ohm load cells)*
Units of Measure	Four active choices *(Kilograms, Ounce, Gram, Pounds, Pound/Ounce, Custom)*
Construction	High resolution Quartzell mounted inside a robust aluminum die-cast clamshell BSQ base with 1100% overload and shock load protection ZK840 indicator is protected inside a tough ABS indicator housing that is most commonly mounted to the front of the BSQ base. This ZK840 indicator can also be easily removed for wall, deck or column mounting. Max workable distance for indicator to work away from the base is 50 ft (15m)
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. Pre-defined or customer 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 and two custom keys)*
Indicator to Base Communications	Local BSQ base connection: one dedicated RS232 connection using a keyed RJ45 connector found on the rear of the ZK840 indicator Second and third BSQ bases: to be wired in through the RS232 communication ports *(found on the rear of the ZK840 indicator) (SMA, 115200, eight data bits, none, one stop bit)* Remote analog base: wired into one of the second analog base connectors. Requires optional 5V excitation card fitting per base

ZK840 COUNTING *Technical Specification*

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	(2) Two serial ports: › Comm 1 RS232 full duplex with hand shake › Comm 2 RS232 full duplex Manual and Auto print function Printer and scanner can share one RS232 port, with a custom application › Supports SMA, ENQ and NCI command response protocols and broadcast › Supports BSQ digital bench bases › Supports External expansion box for allowing other external option cards
USB/VCP *(Device)*	PC Connection *(uses one of the RS232 ports)*
USB Host	(2) Two USB Host ports *(found on the side of the indicator)* can be used for: › USB flash memory › Remote USB keyboard › Scanner › Printer
Ethernet	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
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, tablets or mobile data devices
Application Platform	This application program has beens specially designed to work on both the ZK840 bench scale and our ZM615 weight indicator

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