Avery Weigh-Tronix

ZK840
BALANCE

Industrial balance with
GLP and density formulation

Technical Specification

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

DESCRIPTION

This balance application combines the outstanding accuracy offered by our Quartzell™ technology, with the strength of our BSQ base. Benefit from 1100% overload protection and full side load and shock load protection along with commonly used balance features including a wide range of supervisor selectable units of measure, high resolution mode, Good Laboratory Practice (GLP), percentage weighing and density formulation.

This ZK840 balance provides technicians and operators with comprehensive, accurate weight data analysis without the worry of damaging the balance.

This balance software allows the scale to be used in multiple applications from laboratories to production line quality assurance stations around a factory.

Wide range of accessible units of measure

The ZK840 balance application allows a much larger number of commonly used units of measure to be accessed and activated though the supervisor menu.

Density formulation

Designed to automatically calculate and record density formulations for better time management.

Good laboratory practice (GLP)

Allows accurate data to be recorded based on known calibration records or the ability to regularly recalibrate prior to carrying a set weighing procedure. GLP recalibration can easily be achieved through supervisor access menus.

High resolution mode

This mode allows the balance to operate in high resolution (a factor of x10) for 5 seconds before returning back to normal weighing resolution.

Percentage weighing

A graphical data line helps to identify any percentage weight gain or loss of a substance being measured.

Percentage recipe mixing

Ideal for a wide range of mixing applications where all the ingredients are measured based off a percentage of the core ingredient.

BALANCE AND DENSITY FORMULATION APPLICATION

Application	To be downloaded from Z tools library by a fully trained technician
Display Screens	Display screens have been designed to simplify application with step by step prompts

Density formulation

General weighing

Percentage recipe

Visual Display Aids	Percentage bar graph
Operational Keys	Subject to configuration, basic keys being: zero, tare, print,info, units of measure, high res, GLP, target, Advanced keys: operator I.D., clear, reset, data entry

GLP	Can be carried out manually prior to operation or set based off a timer or daily requirements. The data that can be recorded or printed out for a test is as follows:
	› Manufacturer of the scale
	› Model
	› Serial Number of the scale
	› ID number of the scale
	› Time of calibration
	› Date of calibration
	› Calibration type (External)
	› Calibration Weight
	› Signature
Units of Measure	Four can be selected through the front panel if activated within the supervisor menu Fixed selectable units of measure : lb, kg , grams , oz Custom units of measure: Troy ounce, Metric Carat, Momme, Pennyweight, Grain (UK), Tael (HK general, Singapore), Teal (HK jewellery) Teal (China), Tola (India), Messghal (Iran) which all have their custom conversions listed in the user manual
Density Formulation	Designed to easily calculate a density of a known object by first weighing in air and then in a known solution, the ZK840 gives clear step by step prompts before automatically calculating the density of the object being weighed
High Resolution	Designed to give x10 extra resolution for 5 seconds
Percentage Weighing	Designed to easily measure and record any percentage weight gain or loss off a substance being weighed
Percentage Recipe Mixing	Designed to accurately measure out ingredient by percentage based off the core ingredient
Data Capture and Reports	A wide range of data can be quickly generated and printed or transferred to a known PC application to allow further data analysis
Tare Entry	Push button tare, manually entered tare, pre-stored tare found within the PLU data base
Base Sizes and Capacities	Three base sizes ranging from 2lb to 175 lb or 1kg to 80kg *(please refer to our ZK840 counting specification sheet)*
Legal for Trade	10,000 d single or multi-interval class III down rangeable *(each with three ranges of 10,000 d)*
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
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. On screen 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	(2) Two serial ports: › Comm 1 RS232 full duplex with handshake › 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 Side 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, tablet or mobile data devices
Application Platform	This application program has been specially designed to work on both the ZK840 bench scale and ZM615 weight indicator

www.averyweigh-tronix.com

Avery Weigh-Tronix