Avery Weigh-Tronix

Indicators to measure and control your daily operations.

ZM
300 SERIES

Built for today's needs and tomorrow's challenges

Avery Weigh-Tronix

Leading Edge Indicators

The Avery Weigh-Tronix ZM300 series is a range of indicators for industrial weighing applications. These high performance, multi-function indicators will analyze, store, display and transmit data, providing you with greater visibility of weighing performance. Highly adaptable and available with a choice of display technologies and enclosures, ZM300 series indicators give you the flexibility required to suit different applications and meet your business needs.

Aluminum Enclosure

Stainless Steel IP69K Enclosure

Stainless Steel Panel Mount

IBN Display

TN Display

Enclosures to suit your requirements

ZM300 series indicators are available in a range of enclosures, making them suitable for use in a variety of environments. Whether your application requires protective aluminum, IP69K certified stainless steel or a stainless steel panel mount, we have an enclosure to meet the requirement.

Highly visible display options

The high contrast, nine segment IBN display technology provides excellent color contrast and enhanced viewing angles. The ZM303 is also available with a TN LCD display, featuring dark digits against a lighter background and a green backlight that is easy on the eyes.

ZM300 Series model range

ZM301   IP69K

The ZM301 is a simple-to-operate, basic weight-reading indicator. It captures values at an astounding rate of 80 times per second for fast weighments. The ZM301 features six operational keys, including Zero, Print, Units, Tare, Select and F1. Built-in operational routines or applications can be configured at the time of installation, tailored to your specific solution.

ENCLOSURES: AL SST PM
DISPLAYS: IBN

ZM303   IP69K

The addition of the numeric keypad allows ZM303 users to store multiple tares and numeric IDs in the internal memory for easy retrieval and for simple entry of numeric values when the counting application is active. Keys for counting, checkweighing and process control operations are also standard on the ZM303. The ZM303 offers display and enclosure options for indoor and outdoor applications.

ENCLOSURES: AL SST PM
DISPLAYS: IBN TN

ZM305 STANDARD   IP69K

This ZM305 offers all the functions of the ZM303 but with added power. It also supports in-motion weighing, making it an ideal solution for conveyor scales. Both ZM305 models can connect with up to 14 analog weight sensors and its higher excitation voltage makes it suitable for applications that require input from multiple weight sensors at a longer distance.

ENCLOSURES: SST
DISPLAYS: IBN

ZM305 GTN   IP69K

The ZM305 GTN Inbound-Outbound offers users the ability to store Gross, Tare and Net weights against up to 1000 container/vehicle IDs, providing inbound/outbound weighing. Ideal for use in vehicle weighing applications, the ZM305 GTN Inbound-Outbound can be used for any application where container weights need to be recorded against a tare ID/register.

ENCLOSURES: SST
DISPLAYS: IBN

Built-in applications

The ZM300 series, with the exclusion of the ZM305 GTN Inbound-Outbound, features a range of built-in applications, making them truly multifunctional and ideal to provide a common product for multiple solutions.

The simple to use keypads allow users to view or change the parameters for all normal weighing operations: push-button tare; keypad tare entry; setpoint registers; checkweighing ; identification number; start and stop.

GENERAL WEIGHING

By linking the ZM300 indicators to a simple weighing platform such as a floor or bench scale, the multifunction indicators can be used for basic everyday weighing, including the ability to accumulate, store and recall transactions.

IN-MOTION WEIGHING

The ZM305 Standard is suitable for in–motion weighing, using two inputs that signal when an object enters and exits the weighing zone. The ZM305 Standard is ideal for applications such as monorail or conveyor weighing. The system's built-in Harmonizer™ filtering system adjusts to account for the noise and vibration that is a natural part of many weighing applications.
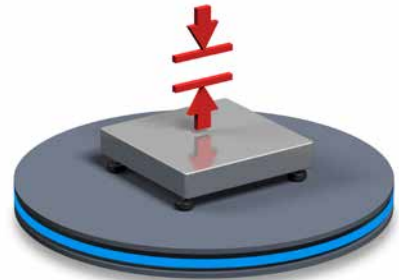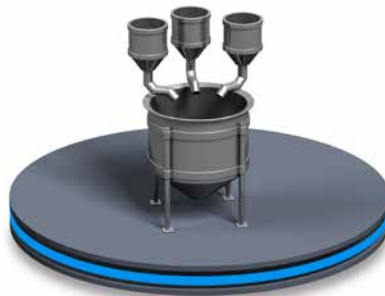
CHECKWEIGHING

The brightly lit display also includes a multi-segment graph. This provides a fast visual weight indication, allowing operators to instantly verify whether products are over, under or within target weight ranges.

PEAK WEIGHT

If a maximum weight reading is required, the ZM300 series can capture and display the peak measurement of stable weights.

PROCESS CONTROL

The multi-segmented graph can be used as a filling status annunciator and is equipped with three setpoint controls to interface with relays for automated mixing or blending.

COUNTING ROUTINES

Built-in counting routine software allows the ZM303 or ZM305 Standard indicators to be paired with floor or bench scales to precisely count high volumes of identical parts.

Harmonizer™ adjustable filtering system

The fully adjustable Harmonizer™ filtering system, which is present on all ZM300 series models, corrects environmental noise and vibration. It offers three types of application-specific filtering: multiple levels of filtering for vibration frequency, adjustment for amplitude, and finally a selectable "threshold," or a level of weight change at which the dampening is disabled. This speeds up the weighing process, quickly identifying any weight changes that exceed the selected threshold value.

Remote operation

ZM300 series indicators can be used as remote displays, enabling easy and convenient viewing of weight information where you need it.

Remote push buttons or foot controls can be attached to all the ZM300 series indicators, improving productivity by enabling operators to activate the indicator remotely in order to perform Zero, Print, Tare, Units, or F1 functions.

ZM305 GTN Inbound/Outbound

The ZM305 GTN Inbound-Outbound shares many of the characteristics of the ZM300 series, including crisp display, simple-to-use interface and IP69K stainless steel enclosure. What sets it apart from the rest of the family is its focus on fleet and truck weighing.

The built-in Inbound-Outbound application offers multiple options for use, from truck-in/out which records a live tare weight of any empty container or vehicle, to use of the keypad to enter known tare weights and truck IDs.

The indicator's database can store up to 1000 truck IDs, including gross, tare and net totals, number of transactions, fleet tare weights and the inbound date/time of a vehicle. Operators have the ability to easily print or export reports showing in, out and fleet transactions.

Ideal for use in vehicle weighing applications, the ZM305 GTN Inbound-Outbound can be used for any application where container weights need to be recorded against a tare ID. When not in use for truck/container weighing, the indicator can also be used for general weighing.

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IP69K Certification

Amongst the range of enclosures available, the laboratory certified IP69K stainless steel enclosure offers complete resistance to dust and water ingress. This certification offers users reassurance that the product is suitable for use in high pressure, heavy washdown and dust-prone applications.

IP69K GORE® Vent

In food applications, indicators may be subject to rapid temperature change, whether due to operating conditions or wash down procedures. Extremes of temperature inside and outside the enclosure can result in expansion and contraction of gases, which in turn can lead to moisture and humidity becoming trapped inside. To avoid this issue, the Avery Weigh-Tronix IP69K certified indicators are fitted with GORE® Vent technology; a membrane which allows the indicator to breathe without compromising the IP69K enclosure. This industrial, food-grade technology guarantees no down time due to water ingress.
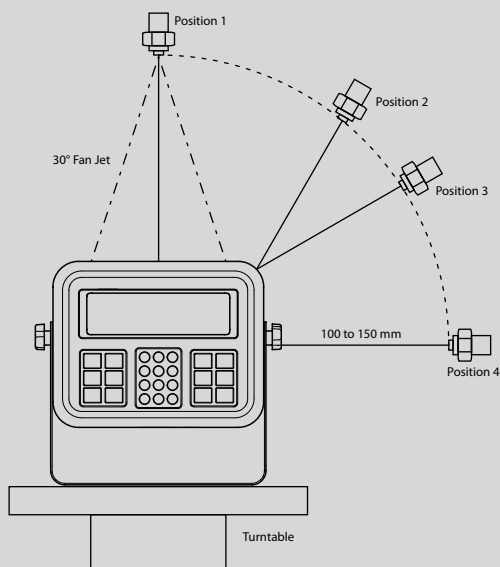
HOW IS THE IP69K WATER INTRUSION TEST PERFORMED?

The water intrusion tests themselves are done by placing the product on a turntable with a rotational speed of 5 ±1 revolutions per minute. The product is then sprayed at close range at a rate of approximately 4 gallons/16 liters per minute with water pressure of between 1160-1450 psi, at a temperature of 176°F/80°C. The nozzle from which the water is sprayed is held between 4 and 6 inches from the product, at a variety of angles. Following this rigorous testing procedure, the product is deemed as having successfully achieved the rating if it completely resists water ingress.

ETHERNET USB SERIAL

Connectivity

The ZM300 series of indicators offers multi-connectivity, ensuring compatibility and communication between old and new peripheral technologies. An Ethernet port is included as standard, supporting fast and efficient data transfer both locally or across the globe via an IP network, while two RS232 serial interface ports provide for data transfer to older equipment. A USB host port facilitates communication with printer hardware as well as offering the option of using a USB storage device to transfer data to a back office PC for integration and management.

Analog output, USB device, Current Loop, RS485/RS422 and Ethernet wireless options are also available, enabling you to utilize the same user-friendly interface for numerous applications with a range of connectivity options to suit your business requirements.
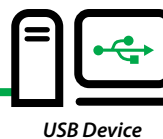
STANDARD CONNECTIVITY
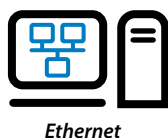
OPTIONAL CONNECTIVITY

Ethernet
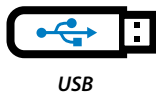
Wireless

USB

USB Device

ZM301/303/305

Analog

RS232 (2)
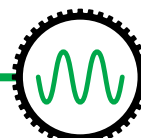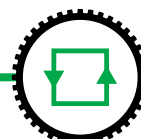
Current Loop and RS485/RS422

Panel Mount

The optional panel mount enclosure allows both the ZM301 and ZM303 to be installed in a larger panel with other automation instrumentation. With IP66 ingress protection, the panel mount enclosure provides protection against dusty or wet environments.

Global agency approvals

Many ZM300 series indicators are approved for use worldwide.

NTEP

Measurement Canada Approved

OIML

Australian Government
National Measurement Institute

IP69K

CE

c(UL)us
LISTED

Ministry of Business, Innovation & Employment

Options

The indicators can be fitted with one internal optional board assembly providing more adaptability for communicating with peripheral devices.

Analog Output Card
0-10 VDC and 4-20 mA.

Current Loop Card
Current Loop/RS485/RS422.

USB Device Card
Provides USB interface to PC.

Wireless Ethernet Internal Card
802.11b/g Wireless

Severe Transient Voltage Suppressor (STVS)
Added protection against voltage surges such as those caused by extreme lightning.

Watertight Glands
Enables USB and/or Ethernet connection without compromising the indicator's resistance to water ingress.

External Battery Pack
Facilitates wireless use, or provides backup in areas that might have a fluctuating power supply. The attachable pack uses D batteries with toggle on/off switch.

Tabletop Stand Kit
For aluminum enclosure models.

More online

www.averyweigh-tronix.com/indicators

› Technical specifications
› User manuals
› Breaking information

PLATINUM DISTRIBUTOR

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Avery Weigh-Tronix is an ITW company

ISO 9001