

Avery Weigh-Tronix



ZM  
400 SERIES

Indicators for advanced  
weighing routines

Weight indicators for  
advanced applications

# Programmable Performance

**Avery Weigh-Tronix**

ZM400 series weight indicators are designed for industrial applications that require advanced weighing routines and high connectivity. These programmable indicators are highly adaptable and can be precisely configured and programmed to meet the needs of your operation.

## User-friendly, functional design

### Enclosures

ZM400 series indicators are IP69K certified, 304 brushed stainless steel. Designed for long service in extreme conditions, including corrosive environments and frequent, heavy washdown, they are available in desk, wall or column mount versions.

### Keypads

The ZM401 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 requirements.

The addition of a more comprehensive 24 key alphanumeric keypad allows ZM405 users to store multiple tares and alpha numeric IDs in the internal memory for easy retrieval and for simple entry of values. Both models also support the addition of a USB keyboard.



ZM405 Stainless Steel IP69K



ZM401 Panel Mount

## Dot-matrix graphical display

High contrast, nine segment IBN display technology provides excellent colour contrast and enhanced viewing angles. To the right of the screen is a dot matrix Graphic Array area which can be used to display a combination of weight data, text and graphics. The dot matrix area can be pre-programmed to display Human Machine Interface (HMI) messages or prompts for the scale operator in a range of languages.



*Bin filling*

### *Alphanumeric part identification*



## Exceptional flexibility

At their simplest, the ZM401 and ZM405 are compatible with a wide range of weighing platforms: bench and floor scales, truck scales, scales for batching, counting and checkweighing.

The ZM400 series has also been designed to provide a fully-configurable solution. The sleek design and user-friendly features provide an ideal platform to build a solution that has been specifically tailored to your business - with no need to compromise.

Your local Avery Weigh-Tronix representative can create application programs that meet your business

requirements. The ZM400 series has also been designed to support application programs that have been built on legacy platforms.



## Feature Rich Capabilities



### Multi-scale input

Supports up to 16 analogue weight sensors and can receive two scale input signals, allowing users to collect and manipulate data from more than one scale at a time.



### Harmonizer™ filtering

The fully adjustable Harmonizer™ filtering system improves weighing accuracy. This programmable filter system can automatically detect and cancel out specific types of interference caused by mixing operations, vibration or machine “noise”.



### Inbound/outbound

Users can store Gross, Tare and Net weights against container/vehicle IDs, providing inbound/outbound weighing. These indicators are ideal for any application where container weights need to be recorded against an alphanumeric tare ID/register.



### Process control

Supports up to 40 set-points (16 physical and 24 virtual) to program the scale to automate and control processes such as mixing or blending.



### Multilingual Capability

The graphic array area on the ZM400 display can be programmed to display user prompts and annunciations in a range of languages, including English, Spanish, French and German.



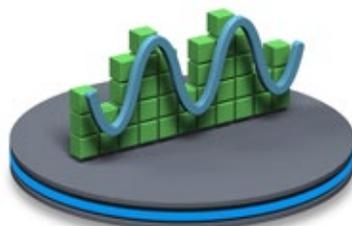
### Multi-range interval weighing

Offers both multi-range and multi-interval weighing, provide optimum user flexibility and accuracy by effectively adjusting division size when the weight increases.



### In-motion weighing

Supports in-motion weighing, making it an ideal solution for conveyor scales. ZM400 series indicators can connect with up to 16 analogue weight sensors and can connect to two scales.



### Analogue and Digital

In addition to connecting with analogue based weight sensors, ZM400 indicators can also perform high resolution measurements from the Avery Weigh-Tronix BSQ digital bench scale.



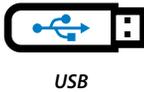
### Remote operation

ZM400 series indicators can be used as remote displays, using remote push buttons or foot control operation to facilitate easy and convenient viewing of weight information where you need it.

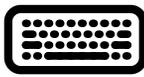
## STANDARD CONNECTIVITY



Ethernet  
Client/Server Sockets  
Ethernet/IP  
Modbus/TCP  
FTP & SMTP



USB



RS232 (2)



ZM401/405

## OPTIONAL CONNECTIVITY



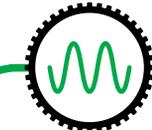
Scale  
Interface



Wireless



USB Device



Analog



AC/DC

I/O Relays



Current Loop and  
RS485/RS422



DeviceNet™



Profibus®

## Versatile Connectivity

The ZM400 series of indicators offers multi-connectivity, ensuring compatibility and communication between old and new peripheral technologies. An Ethernet port which supports client/server Ethernet sockets, DHCP and FTP file transfers, is included as standard, two RS232 serial interface ports provide data transfer to

older equipment and a USB host port facilitates communication with printer or keyboard and data transfer via a USB storage device.

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

## IP69K Certification and Gore Vent

The laboratory certified IP69K stainless steel enclosure on both the ZM401 and ZM405 offers complete resistance to dust and water ingress. This offers users reassurance that the product is suitable for use in high pressure, heavy washdown and dust-prone applications.

In food applications, extremes of temperature inside and outside the enclosure can lead to moisture and humidity becoming trapped. The Avery Weigh-Tronix IP69K certified indicators are fitted with GORE® Vent technology; a membrane which allows the indicator to breathe while guaranteeing no down time due to water ingress.



## Options

Option kits can be added to extend the functionality of the ZM400 series:



### Expansion Cards

#### Setpoint

- › ZM-OPTO setpoint interface

#### I/O relay

- › External I/O interface kit
- › DC Output, 4 relays 3-60VDC at 2A kit
- › DC Input, 4 Inputs 3-30VDC kit
- › AC Output, 4 relays 20-240VAC at 1A kit (IP69K models)
- › AC Input, 4 Inputs 120-240VAC kit (IP69K models)

#### Second Analogue Scale

- › Scale Input 5 VDC excitation kit
- › Scale Input 10 VDC excitation with STVS kit

#### Connectivity

- › Wireless Ethernet 802.11 b/g kit
- › USB Device kit
- › Profibus kit®
- › DeviceNet™
- › Analogue Output
- › Current Loop and RS485/RS422



### Lightning Protection

- › Severe Transient Voltage Suppressor (STVS)  
Extreme Lightning protection



### Watertight Glands

- › Enables USB and/or Ethernet connection without compromising the indicator's resistance to water ingress

### More online

- › Technical specifications
- › User manuals
- › News and information



[www.averyweigh-tronix.com/zm400](http://www.averyweigh-tronix.com/zm400)



### ZM Indicators

Avery Weigh-Tronix offers a full line of ZM series indicators.

# Avery Weigh-Tronix

[www.averyweigh-tronix.com](http://www.averyweigh-tronix.com)

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