

Indicators to measure and control your daily operations.

## Frequently Asked Questions

### 1. The ZM300 series is comprised of eight different products, what are they?

Three ZM301 products:

- › ZM301 Aluminium enclosure with IBN display
- › ZM301 IP69K Stainless Steel with IBN display
- › ZM301 Panel Mount with IBN display

Five ZM303 products:

- › ZM303 Aluminium enclosure with IBN display
- › ZM303 Aluminium enclosure with TN display
- › ZM303 IP69K Stainless Steel with IBN display
- › ZM303 IP69K Stainless Steel with TN display
- › ZM303 Panel Mount with IBN display

### 2. What is an IBN display?

This display technology provides tremendous contrast between its illuminated digits and surrounding background. It is used within the automotive industry to improve viewing in both bright and dimly lit environments.

### 3. What is a TN display?

This technology provides dark digits against a green background for great viewing in direct sunlight.

### 4. Are the rounded enclosure corners and modern coloured keys standard?

Through market research, Voice of Customer, and extensive application research, the ZM301 and ZM303 indicators have been designed using a patent pending design language to create a common product offering. The design language consists of colourful easy to read keys as well as industry leading, easy to clean rounded corners.

### 5. What power source is required to operate these indicators?

The indicators can operate from a mains power of 90-264 VAC (110-240 VAC nominal), 50 or 60 Hz, 12 to 36 VDC or from the optional external battery pack.

### 6. How long will the optional external battery pack power the scale?

The external optional battery pack utilises four D cell batteries. Fresh batteries will maintain operation of a single weight sensor system for 12 hours, or a four weight sensor system for 11 hours.

### 7. The keys on the front panel have a crisp snapping response, is this normal?

The indicator's durable front panels are chemical resistant and the keys' tactile feedback is maintained by high quality steel spring domes.

### 8. Is the IP69K stainless steel a standard feature?

The stainless steel models are IP69K certified. In addition to this enclosure, the indicator is available in a black IP20 aluminium enclosure for non harsh environments and a panel mount enclosure for system integration, which, when properly installed, provides an IP66 rating.

### 9. What does IP69K mean?

IP69K is a worldwide recognised standard which defines the ingress protection of the enclosure. The ZM301 and ZM303 stainless steel models are third party IP69K (IEC 60529) certified by A2LA and Environ Labs. Do not be misled by brands that state their products are designed or equal to IP69K without certification.

### 10. In addition to the ingress protection IP69K provides, is there a solution for internal condensation that may occur when a cold stainless steel enclosure is subjected to hot steamy water during a cleaning cycle?

Each stainless steel IP69K enclosure includes a patented air pressure and temperature equalising solution.

### 11. How many weight sensors do the ZM301 and ZM303 support?

These indicators support up to six 350 ohm weight sensors.

## 12. Do the indicators have a built-in suite of operating applications?

Yes, through configuration the indicators can operate for:

- › **General Weighing** that can be accumulated, stored and recalled
- › **Checkweighing** with multi-segment graph
- › **Parts Counting** displaying the number of pieces on the weighing platform
- › **Peak Weighing** which captures the maximum weight value
- › **Process Control** for mixing or filling with a status graph bar
- › **Remote display** - this can be connected to host devices providing secondary access

## 13. How do you configure the set up parameters for the indicators?

The indicators can be configured through a sequence of key presses on the front panel or through the use of the PC support software program Ztools.

## 14. Can communication output strings be changed?

The selected application suite includes a default print string and protocol, but these can be enhanced or modified through the front panel or by using Ztools. For ease of configuration we recommend the use of Ztools (PC software program).

## 15. What are the PC requirements for Ztools software?

Minimum:

- › CPU: Intel Celeron 900 (2.2GHz/800MHz FSB 1MB Cache) or Intel i3
- › RAM: 2GB
- › Hard Drive: 500GB
- › Video Card: 512MB Integrated
- › Display: 15.6 inch display
- › Resolution: 1366x768
- › OS: WinXP (32-bit), Windows 7 Home Premium (32/64-bit)
- › Communications: 10/100 Ethernet
- › Optical Drive: CD/DVD

Recommended:

- › CPU: Pentium Core 2 Duo T6600 (2.2GHz/800MHz FSB, 2MB Cache) or Intel i5
- › RAM: 4GB
- › Hard Drive: 500GB
- › Video Card: 512MB Integrated
- › Display: >15.6 inch display
- › Resolution: 1366x768
- › OS: WinXP (32-bit), Windows 7 Home Premium (32/64-bit)
- › Communications: 10/100 Ethernet
- › Optical Drive: CD/DVD

Top of the line:

- › CPU: Intel i7
- › RAM: >4GB
- › Hard Drive: >500GB
- › Video Card: 1024MB Dedicated Video Card
- › Display: >15.6 inch display
- › Resolution: 1920x1080
- › OS: WinXP (32-bit), Windows 7 Professional (32/64-bit)

- › Communications: 10/100 Ethernet
- › Optical Drive: CD/DVD

## 16. The ZM301 and ZM303 indicators have so many communication ports, which one is used for downloading the Ztools configuration to the indicator?

The indicators include an Ethernet communication port which is used for connecting to the PC and communicating Ztools configurations.

## 17. What other applications would use the Ethernet port?

This port provides Ethernet IP and Modbus/TCP which can be used with PLC devices and sockets. The output string is adaptable through configuration for PLC, Sockets, SMA, Broadcast and FTP.

## 18. Many peripheral devices including printers have USB interfaces; do these indicators provide a solution to connect to these printers without using a serial to USB converter?

Yes, the ZM300 series provides a standard USB Host communication port.

## 19. What printers and interface technologies have been tested with the ZM300 Series?

- › AWTX ZC110 Impact Printer (serial)
- › AWTX ZG310 Thermal Printer (serial)
- › HP Officejet Pro 8500A e-All-in-One Printer - A910a (USB, Wired and Wireless Ethernet)
- › HP Officejet Pro 8600 Plus e-All-in-One Printer (USB, Wired and Wireless Ethernet)
- › HP LaserJet Pro M1536dnf Multifunction e-Printer (USB, Ethernet)
- › HP LaserJet Pro CM1415fnw Colour e-MFP (USB, Ethernet, Wireless Ethernet)
- › HP LaserJet Pro CP1525nw (USB, Wired and Wireless Ethernet)
- › HP A799 (USB, serial)
- › Zebra LP2824 (USB, serial)
- › Zebra LP2844 (USB, serial)
- › Epson tm-u220b (serial, Ethernet, USB)
- › Epson TM-T88V M244A (USB, Wired Ethernet, serial)
- › Epson Tm-T20 (USB)
- › LP-250 Brecknell Thermal Printer (serial)
- › LP-470 Brecknell Thermal Printer (serial)
- › Brecknell DT 2205 (serial, USB)

## 20. What if I have a printer that is not on this list?

As manufacturers change their designs, Avery Weigh-Tronix will continually review the list of printers. Printer manufacturers maintain levels of backward compatibility. For example, if you own an HP 8600 series printer, connecting it to the ZM303 USB port works by selecting the HP 8500 selection. The generic printer settings in the product also allow flexibility with new and legacy printers that are not listed.

## 21. When one printer model offers multiple interfaces which interface is active?

Please review the printer specifications as some communication ports may require activation before data is accepted from the indicator.

## 22. Are any additional options available for the ZM300 Series?

Additional options that can be added to the ZM300 Series include:

- › Analogue Output
- › Current Loop/RS485/RS422
- › USB Device
- › Internal wireless 802.11b/g
- › External battery pack
- › USB and Ethernet watertight glands
- › 90-230 VAC In-line power module
- › Stand kit for the aluminum enclosed models
- › ZM-OPTO setpoint interface

## 23. Are the ZM301 and ZM303 indicators approved as legal for trade?

The agency listings for these products include:

- › NTEP (US) Class III/IIIL 10,000 d (CC# 11-096)
- › OIML (European and UK) Class III 6,000 d (R76/2006-GB1-12.04)
- › AM (Measurement Canada) (AM-5841C)
- › Australia (NMI)\*
- › MID R61
- › South Africa\*
- › New Zealand\*
- › India\*
- › CE
- › UL/C-UL-US
- › EC
- › IP69K (case)
- › \*pending

## 24. The previous indicator range used levered connectors for interface cables; does this product have a better solution?

Improving accessibility for connecting cables was a common request from participants in the Voice Of Customer interviews. These indicators use a two part detachable solution allowing connections to be made outside of a confined space and then to plug this assembly into its socket.

## 25. Is there a relay control option for the setpoint outputs?

The optional ZM-OPTO assembly provides a solution to activate devices used for setpoints and for inputs.

**Avery Weigh-Tronix - UK**  
Foundry Lane, Smethwick,  
West Midlands B66 2LP UK  
info@awtxglobal.com  
Phone: +44 (0) 8453 66 77 88  
Fax: +44 (0) 121 224 8183

**Avery Weigh-Tronix - USA**  
1000 Armstrong Drive,  
Fairmont, MN 56031-1439 USA  
usinfo@awtxglobal.com  
Toll-Free: (800) 533-0456  
Phone: (507) 238-4461

**Avery Weigh-Tronix**

Please call us or visit [www.averyweigh-tronix.com](http://www.averyweigh-tronix.com)

