

Weight-based Bulk Weighing System to Maximise Your Throughput & Profits.

Frequently Asked Questions

1. What is the difference between target mode and throughput mode?

Target mode is used when you have a set target weight to dispatch or receive which can be preset in the system.

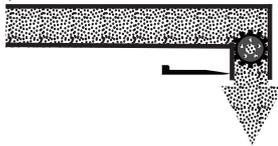
Throughput mode is used when you do not have a target weight to dispatch or receive. The process is completed when the product runs out or the working day ends. The system gives a total of product received or dispatched over this period

2. What is the plant interlock?

This is a safety feature; the plant interlock is an output from the plant system to indicate that it is safe to start the bulk weighing process. During the bulk weighing process, if the plant interlock is triggered, the bulk weighing system will automatically stop.

3. What are the gate sensors?

The Gate Sensor detects if the gate is open or closed. If the gate is in the wrong position an alarm sounds and the system stops. An alarm can be set up to alert the plant.



4. What are the gate sensor timers?

Each gate has two timers 'Gate Actuator Delay' and the 'Gate Err Alarm Timeout'.

Gate Actuator Delay is the time the gate takes to open or close.

Gate Err Alarm Timeout is the time it takes to trigger an alarm. (This delay is always greater than the Actuator delay).

5. When setting up a process, what is the different between "Stable or Unstable"?

When setup as '**stable**' the weighing hopper will not start to discharge until the weight has stabilised, at which time, the system records the stable weight, this method is slower but records a more accurate weight reading.

If the weighing hopper is setup as '**unstable**' the hopper will discharge as soon as the target weight is reached and record the unstable weight, giving a faster but less accurate weight reading.

6. Can the tip size be different from the capacity of the hopper?

Yes, this is part of the setup where you can configure the size of the tip to be different (less than) the capacity of the hopper.

7. Does the system have in-flight compensation?

Yes, the system has manual and automatic in-flight compensation which captures the material when it is in flight. When the system is in automatic mode it can calculate any changes on each discharge.

8. Does the weighing hopper need to be fully discharged between tips?

No, the system can be set up so that a percentage of the capacity of the hopper can be left in the hopper between tips, this is to allow for more sticky products which do not fully discharge from the hopper between tips.

9. What is the minimum and maximum capacity of the weighing hopper when using this system?

The system can be integrated to weighing hoppers of any size.

10. Can the system handle kg and lbs?

Yes, system can be setup to handle any single unit of measure including, but not limited to, kg, lb and tons.

11. Can the system be used without the extra option cards fitted?

Yes, it can but this will limit the functionality of the application. In its most simple setup no option cards are needed. If all input sensors are needed, then two input cards must be fitted. For alarm outputs and surge hopper control, two output cards must be fitted.

12. Can the system use external start or stop buttons?

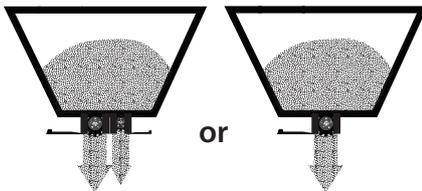
Yes, the system can utilise external start and stop buttons.

13. What is the Dump Hopper Sensor used for?

The Dump Hopper Sensor tells the system that something is under the weighing hopper to receive the discharge.

14. Can the system handle fast and slow filling?

Yes, the system can be setup to use a single filling head or a dual filling head for fast and slow filling.



15. Can the system jog/top up?

No, the system does not have a jog/top up function for a single tip, what it does have is a dynamic tip mode and adjusts the next tips to compensate.

16. How do I use the numeric keys on the ZM510 QWERTY keyboard?

A key labelled Num Lock is located at the bottom right of the keyboard. Pressing this key will exclusively enable the numeric keys.

17. How do I re-enable the alpha characters?

Press the Num Lock key again to unlock the numeric entry mode.

18. When I press a key, an audio beep is heard. Is that normal?

When these large keys are pressed, you will hear a beep sound providing audio confirmation that the contact closure has occurred.

19. When a key is pressed, it seems to provide a mechanical confirmation?

Yes, each key has a metal dome which provides a physical confirmation when the keys are pressed.

20. What power source is required for operation?

These indicators can operate from a mains power of 110-240 VAC nominal, 50/60 Hz or 12 to 36 VDC.

21. How many 350 ohm weight sensors will these indicators support?

The ZM510 can support up to twenty four 350 ohm weight sensors and the ZM615 supports up to thirty two 350 ohm weight sensors.

22. The excitation voltage to the weight sensors is 10 VDC (+/- 5 VDC), how long can the cable length be from the scale to the indicator?

The length of the cable is dependent on a number of influences, including the number of weight sensors, the quality and gauge of the cable, the installation method (conduit) and any external source of electrical noise.

The OIML cable test identifies 153 meters with twenty four weight sensors.

23. Is the high quality stainless enclosure standard?

The 304 brushed stainless steel enclosure and a table top stand are included. The stand offers provisions for mounting to a pole or surface (table or wall).

24. What is the ingress rating for these indicators?

The desk top indicators have been laboratory tested by an independent company following the EC 60529 standards and an IP69K certificate stating compliance has been issued.

Do not be misled by brands that state their products are designed or equal to IP69K. A certificate stating compliance by an independent laboratory is proof.

25. What does IP69K certified mean?

Avery Weigh-Tronix has posted a FAQ online explaining the process and value of this water and dust ingress protection. This can be found by a simple web search of 'what is IP69K'?

26. Is there a solution for potential condensation that may occur during extreme temperature and moisture changes?

Each stainless steel IP69K certified enclosure includes the patented air pressure and temperature equalizing GORE® Vent technology.

27. Can the communication output strings be changed?

Yes, the default print strings and protocol can be enhanced or modified.

28. Are any additional options available for these indicators?

Up to four additional option kits can be added inside the indicator and the list of choices includes:

- › Analog Output
- › USB Device
- › Profibus®
- › DeviceNet™
- › Internal (Ethernet) wireless 802.11b/g
- › Internal 120 VAC relay module
- › ZM-OPTO setpoint interface
- › Scale Input 10 VDC excitation with STVS kit
- › DC Output, 4 relays 3-60VDC at 2A Kit
- › DC Input, 4 Inputs 4-30VDC
- › External I/O Interface
- › AC Output, 4 relays 20-240VAC at 1A kit
- › AC Input, 4 Inputs 120-240VAC kit

29. The ZM510 and ZM615 have built-in standard lightning and transient voltage protection plus there is an option for protection against Severe Transient Voltage (STVS) and Extreme Lightning. On what installations would this option be recommended?

The additional Severe Transient Voltage (STVS) and Extreme Lightning Protection option is recommended for desk top model scale installation areas that experience frequent weather conditions involving severe lightning storms and environments where radiating voltages could potentially be picked up by the incoming scale cable.

Plus if the installed application has containers with plastic rubbing on the scale creating a static charge.

30. Some specifications focus on the speed of the Analog to Digital circuitry, what is the speed of the ZM510 and ZM615?

The Analog to Digital activity is occurring at 100 Hz.

31. Do the ZM510 and ZM615 have the connection friendly detachable connectors for the wiring of the cables?

Yes, the detachable connectors for completing wire terminations conveniently and then simply plug this connector back together on the circuit board.

32. Can the Bulk Weighing application control more than one weighing hopper?

No, this application can only control a single weighing hopper.

More online

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

www.averyweigh-tronix.com



Avery Weigh-Tronix

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company