



Indicators for daily weighing tasks with powerful built-in applications.

Technical Specification

DESCRIPTION

ZM201 Series indicators are ideal for applications that require a basic weighing indicator for performing Zero, Tare and Print functions. Their simple yet powerful design makes them the perfect choice for connecting with bench, platform or floor scale and bin/tank/hopper (vessel) scales.

SPECIFICATIONS

GENERAL

Operating Applications	General weighing, general weighing with accumulation, checkweighing, counting, peak measurement, batching and remote display
Calibration	Two to five points stored
Analog To Digital Measurement Rate	80 Hz
Unit Of Measure	Two, configurable (pounds, kilograms, ounce, gram, pound/ounce, custom)
Capacity Selections	9,999,999 with decimal located zero to five places
Incremental Selections	Multiples and sub-multiples of 1, 2, 5
Programmable Selections	Zero range, motion detection, automatic zero tracking, five point linearization
Time And Date	Battery backed up time/date/year (12 hr or 24 hour format)
Internal Resolution	53,687,100 counts per mV/V per second
Digital Filtering	Harmonizer filtering with adaptable constant and threshold
Self Diagnostics	Display, keys, inputs, outputs, serial port

ELECTRICAL

Power Requirements	<i>Line voltage:</i> 90 VAC to 264 VAC (110-240 VAC nominal), frequency 50 or 60 Hz, 12 to 36 VDC <i>Power consumption:</i> estimated at 150 mA at 12 VDC for one weight sensor and 180 mA at 12 VDC for four weight sensors
Excitation	5 VDC, short circuit protected Supports up to four 350 ohm weight sensors 4 or 6 conductors with sense leads Detachable plug connectors
Analog Signal Input Range	-1 mV/V to 5 mV/V
Analog Signal Sensitivity	0.1 μ V/V/divisions minimum 0.5 μ V/V/divisions recommended

USER INTERFACE

Operational Keys	Tare, Select, Zero, Print, Units, F1, On/Off (no keys on signal processor)
Status Annunciators	Center of Zero, Motion, Gross, Net, Tare, Count, Print, Battery Status, Setpoint 1, Setpoint 2, Setpoint 3, Over/Under/Accept bar graph or fill bar graph, lb, kg, Preset Tare, Total, (Custom unit of measure– lb/oz, ton, gram, configurable), Active Ethernet connection
Keypad	7 key chemical resistant polycarbonate

ZM201 SERIES *Technical Specification*

Display	<p>ABS: TN backlit 7-digit seven segment display with 1.2 in / 30 mm high digits</p> <p>Stainless steel: TN backlit 7-digit seven segment display with 0.5 in / 13 mm high digits</p> <p>Panel mount: TN backlit 7-digit seven segment display with 0.5 in / 13 mm high digits</p> <p>Signal processor: No display</p> <p>Displays have annunciators for status and mode identification</p>
----------------	---

Display Rate	Selectable (1, 2, 5, 10) times per second
---------------------	---

INPUT/OUTPUT

Remote Inputs	Three logic level inputs for Zero, Print, Tare, Units, or Select
Standard Outputs	Three set point outputs, open collector design
Communications	<p>Two serial ports:</p> <ul style="list-style-type: none"> - Comm 1 RS232, no handshaking - Comm 2 RS232, no handshaking <p>Ethernet: TCP/IP, DHCP, Static IP</p> <p>Protocols (all ports):</p> <ul style="list-style-type: none"> - SMA Broadcast, Remote Display, and NCI <p>ZM201 Signal Processor Modbus/TCP</p>

Circuitry Protection	RFI, EMI and ESD protection
-----------------------------	-----------------------------

PHYSICAL

Operating Temperature	<p>Compliance with legal-for-trade requirements</p> <p>Approval: 14° to 104° F / -10° to 40° C</p> <p>at 10 to 90% relative humidity, non-condensing</p> <p>Industrial: -4° to 140° F / -20° to 60° C</p> <p>at 10 to 90% relative humidity, non-condensing</p>
Enclosure	<p>Stainless steel: 304 brushed stainless steel IP66 with tilt stan mounting bracket</p> <p>Plastic: ABS plastic IP20 with rubber feet</p> <p>Panel mount: Stainless steel panel mount IP66</p>
Weight	<p>ABS: 3.87 lb / 1.75 kg</p> <p>Stainless steel: 7.34 lb / 3.32 kg</p> <p>Panel mount: 4.18 lb / 1.89 kg</p> <p>Signal processor: 4.25 lb / 1.93 kg</p>

Dimensions	See drawings
-------------------	--------------

APPROVALS

Patent	US Patent 672,262
Agencies	<p>NTEP (US) Class III/IIIL 10,000 d CC# 13-017</p> <p>OIML (European and UK) Class III 6,000 d</p> <p>Measurement Canada AM-5902C[†]</p> <p>Australia (NMI)</p> <p>MID R61</p> <p>South Africa*</p> <p>New Zealand</p> <p>India</p> <p>CE</p> <p>UL/cUL</p> <p>EC</p>



Measurement
Canada Approved
AM-5902C

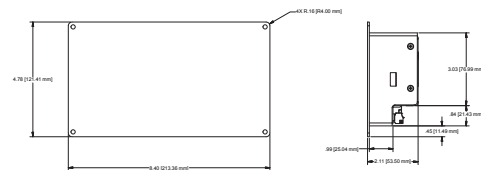


* Pending

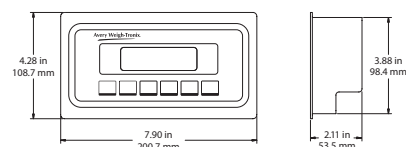
[†] Signal Processor
not approved by
Measurement Canada

OPTIONS

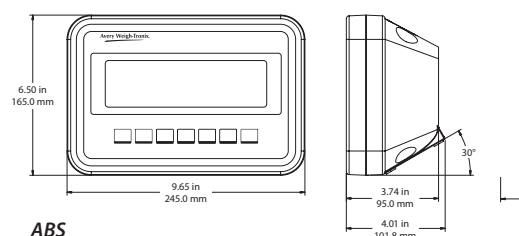
Battery Pack	Internal NiMH rechargeable pack providing 18 hours operation on a single weight sensor system and 14 hours on a four weight sensor system. For application environments that operate above 50° F / 10° C, the maximum charge time is five hours. For application environments that operate and charge below 10° C, the charger circuit will utilize trickle charging and full recharge will take up to 23 hours.
ZM-OPTO	Provides setpoint interface
Ethernet Watertight Gland	Rubberized and sealed
AC to DC Power	In-Line AC to DC power module
Pole Mounting Kit	For ABS model



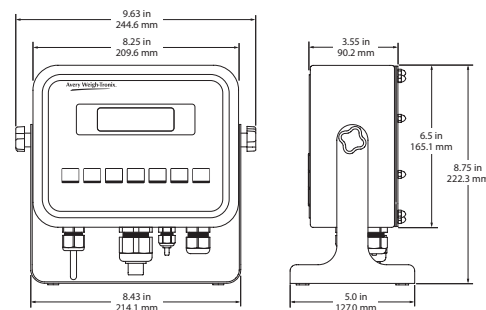
Signal Processor



Panel Mount



ABS



Stainless Steel

More online

www.averyweigh-tronix.com/zm201

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



MAPLE  SCALES
— SOLUTIONS THAT WEIGH —

Avery Weigh-Tronix



Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works Inc ("Illinois Tool Works"). Copyright © 2020 Illinois Tool Works. All rights reserved. This publication is issued to provide outline information only and may not be regarded as a representation relating to the products or services concerned. This publication was correct at the time of going to print, however Avery Weigh-Tronix reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.