



AVS-7

vehicle scale controller

Technical Specification

DESCRIPTION

General

The AVS-7 Vehicle Scale Controller is based on the E1310 indicator and provides a reliable solution for truck scale applications that require stand-alone, unattended, driver-operated weighing. The system is available with many different hardware configurations to meet exact customer needs. It connects seamlessly to any Avery Weigh-Tronix truck scale as well as many other makes and models.

Robust Design

The AVS-7 components are all UL approved and housed in a rugged, lockable enclosure that is NEMA 4 rated for outdoor environments.

Standard Features

Panel mounted E1310 indicator with sun shield, thermal printer with cutter/presenter and large paper roll.

Transactions are stored in the indicator's memory. Database tables are provided for Tag ID, Vehicle ID, Contract ID, Customer ID, Product ID, and Hauler ID. There are also four fields that can be user defined.



SPECIFICATIONS

Power

100-130 VAC, 12 A, 50/60 Hz

230 VAC, 6A, 50/60 Hz

Fusing

10A 3 AG

E1310 User Interface

Display

Type

Dot graphic cold cathode fluorescent backlit, white characters on blue background. 1.5" high x 5" wide (38.1 mm x 127 mm), 64 x 240 dot layout. Capable of displaying alpha-numeric characters.

Decimal point

Configurable to any of the 8 positions

Units of measure

kg, g, lb, oz, lb-oz plus 4 programmable custom units

Refresh rate

Programmable up to 10 times per second

Languages

Selectable operation prompts in English, French and Spanish

Keypad

24 Tactile/audio feedback corrosion resistant keys:

10 Alpha numeric entry

9 Dedicated function keys (Zero, Tare, Print, Units, Select, Enter, Escape, Clear and Decimal Point)

Note: These keys can also be assigned specific tasks.

5 Programmable and labeled soft keys (F keys)

Load Cell Input

Analog

Number of cells

Can support/power up to 32 x 350Ω strain gauge load cells using 4 or 6 wire connection technology.

Indicator to scale separation up to 2000 ft.

Excitation

10V DC or 10V AC square wave.

Analog to Digital Converter

Type: Delta Sigma

Rate: 60 updates per second

Resolution: 1,000,000 increments

14° F to +104° F (-10° C to +40° C).

Zero

Setting

Keypad push button programmable to be effective between 1% and 100% maximum capacity

Zero band

Non-approved, $\pm 100\%$ of maximum capacity

Approved, $\pm 2\%$ of maximum capacity

Zero indication

The "→0←" symbol is turned on when the gross weight is within $\pm \frac{1}{4}$ division of the zero scale interval.

Zero tracking

Programmable to track zero, in either net or gross mode, within the zero band

Under and over range indication

Display is "dashed" out and an operator warning is displayed.

Linearization/Multiplier

Linearization

Full digital 10 point linearization

Increment multiplier

Sets or subsets of 1, 2, & 5 i.e. 0.001 to 50

Filters/Damping

Type

Harmonizer™ digital filtering is fully adjustable to damp out the effects of noise and vibration.

Stages

Frequency – 6 levels of adjustment

Amplitude – 8 levels of adjustment

Threshold – Band, outside of which frequency/ amplitude filtering is disabled until new band is established around new nominal weight.

Real Time Clock

Battery backed real time clock for time and date stamping data

Printer

Direct thermal, guillotine cutter, jam-preventing loop presenter, tear-preventing pull detector, auto paper loading, 203-dpi printing (8 dots/mm).

Paper Roll

Thermal

3.15 in (80 mm) width

6 in (152 mm) diameter

660 ft (201 m) total length



Industrial Network Cards

Capabilities include monitoring and data collection via a web browser (HTTP), operational updates and error reporting via e-mail (SMTP) and raw data transmission via FTP. Two separate industrial networks can operate at the same time. They can operate independently or transfer data between the networks.

DeviceNet™ card

InterBus card

ControlNet™ card

ProfiBus® card

ModBus Plus card

Ethernet10/100 card [supports Ethernet-ModBus TCP, Ethernet TCP/IP (raw socket client), Ethernet TCP/IP (raw socket server), Ethernet IT, Ethernet/IP, HTTP, SMTP, SSI and FTP]

Remote I/O card

LonWorks® card

Internal Modem Card

Internal modem for (digital and analog) telephone access.

Enclosure

Lockable painted steel, NEMA 4 standard, NEMA 3R with ventilation

Enclosure Heater (optional)

400W, 115 VAC, 50/60 Hz, 3.72 Amps, thermostat controlled

400W, 230 VAC, 50/60 Hz, 1.86 Amps, thermostat controlled

Enclosure Ventilation (optional)

NEMA 3R, ball bearing axial fan, lockable intake and exhaust hoods, replaceable F5 synthetic filters.

Environmental

Storage temperature

-40° F to + 140° F (-40° C to +60° C)

Operating temperature

14° F to + 104° F (-10° C to +40° C)

Humidity

0 to 95% non-condensing

Warranty

Two-year limited

Approvals

NTEP Class III/IIIL to 10,000 divisions CC# 01-033 A1

EC approval No: UK 2678 type approval certificate to 6,000 divisions (single platform only). Meets and exceeds the requirements of EN45501:1992. European Accuracy class III machines.

CE marked

UL 508 approved

FCC class A

OPTIONS

Memory Expansion

Up to 2 memory expansion cards can be added to give a total of 8 MB additional memory.

1 MB card

4 MB card

Proximity Card Reader

Rugged, weatherized polycarbonate enclosure, tri-state LED indication, read range up to 8 in (203 mm), transmit frequency 125 kHz, recognizes card formats up to 37-bit.

Proximity Access Card

Frequency 125 kHz, operating temperature -50° F to 160° F (-45° to 70° C), weight 0.24 oz (6.8 g), dimensions 2.14" x 3.39" x 0.08" (5.4 x 8.6 x 0.2 cm).

QWERTY Keyboard

61 keys, vandal resistant (20J BS EN 60068-2-75:1997) stainless steel front plate, weather resistant (IP65)

Loop Vehicle Detector

I/O selectable sensitivity levels, two-color LED status indicator, self-tuning, continuous loop monitor remembers intermittent and failed loops, respond time 125 milliseconds after vehicle enters loop, loop inductance range 20 to 2,000 microhenries with Q factor of 5 or greater.

Approach Loops

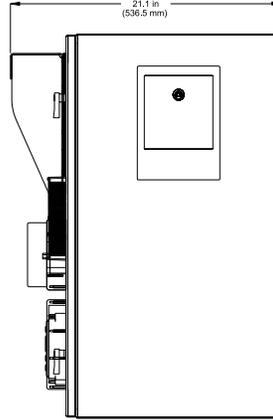
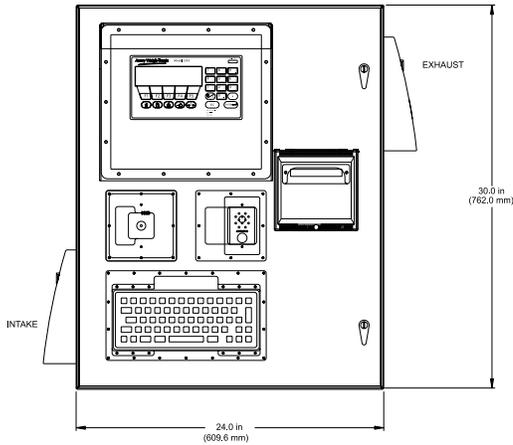
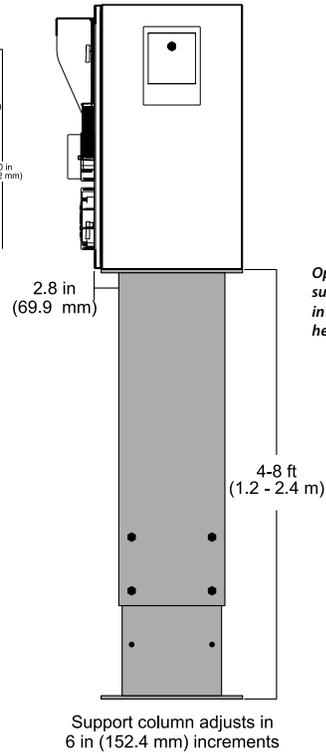
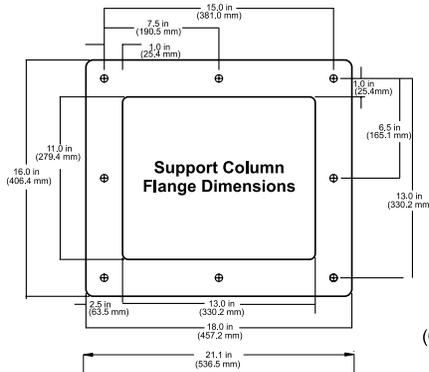
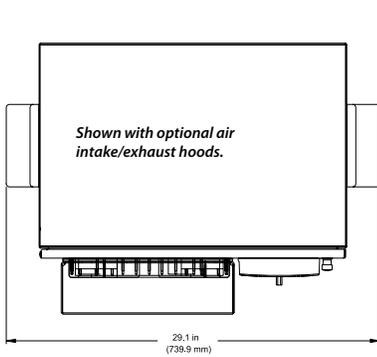
Preformed wire.

Traffic Light Control

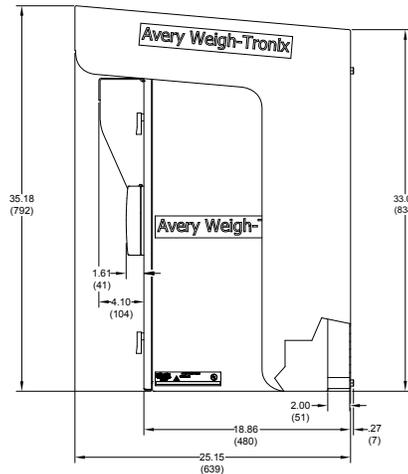
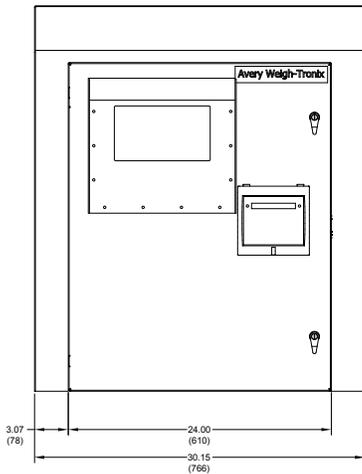
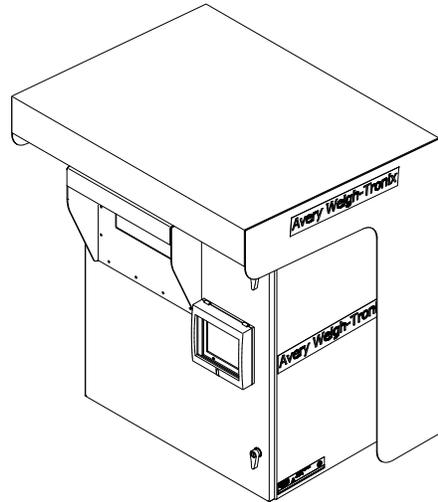
Four (4) Opto 22 solid state relays



DIMENSIONS



Shown with optional sun shroud.



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