A member of the Avery Weigh-Tronix Group

# 660 Series Digital Indicators

## *Models 660, 662, 663 and 665*

*660*

*662*

*665*

*663*

## SPECIFICATIONS

### ELECTRICAL

**Power Input:** AC, 90 – 250 VAC, 50/60 Hz, DC, 10 – 32VDC

**DC Output:** +5VDC, +24VDC

**Excitation Voltage:** 10 VDC, short circuit protected

**Excitation Current:** 400 mA, short circuit protected

**Fuse:** 0.8A Slow – Blow (when using AC power)

**Signal Input Sensitivity:** 0.1 – 20 mV/V

**Signal Connection:** 4 or 6 lead with sense leads

**Excitation Power:** 14 – 350 ohm weight sensors

### PERFORMANCE

**Full Scale (F.S.):** Selectable 0.01 to 999,990

**A/D Conversion:** 60 Hz

**Resolution:** 100,000d display, 1,000,000 internal

**Flash Memory:** 1 M Bytes

**Zero Track:** Off – 20d

**Zero Range:** Selectable, 0.01-100% Full Scale

**Non–Linearity:** 0.005% Full Scale, Load Cell dependent

**Operating Temperature:** -10° C to +40° C

**Units of Measure:** 4 user defined per scale, 2 custom units

**Time/Date Clock:** Real time clock

### KEYPAD

**All Models:** Durable elastomeric rubber, 28 Key (Zero, Print, Units, Tare, Select, Enter, 5 Function, Scale Select, Clear ID, Start, Stop, Setup and Full Numeric)

### DISPLAY

**VFD (660/665):** Bright 6 digit 75" (20.3mm) Vacuum Fluorescent with 2x5 (10 character) dot matrix for scale status and operator prompting.

(**665**): Bright 4 line x 20 character Vacuum Fluorescent Display, 0.31"

**LCD (662):** 8 line x 40 character graphic display, backlight, 3 font sizes

**(663/665):** 16 line x 40 character graphic display, backlight, 3 font sizes

### COMMUNICATIONS

**Port 1:** RS232 Full Duplex serial port or RS 485 or 20 mA optional

**Port 2, 3:** RS232 Full Duplex

**Port 4:** RS232 Full Duplex or TTL interface to 4x20 VFD

**Protocols:** Modbus™, (DeviceNet™, Profibus®, Ethernet optional)

**Baud Rate:** 150 – 115K bps

**Custom Transmit Tables:** 4 – user defined RS232 output tables

**Input Interpreter Tables:** 15 – user defined RS232 input tables

*SPECIFICATIONS CONTINUE ON NEXT PAGE*

*SPECIFICATIONS CONTINUED FROM PREVIOUS PAGE*

## PROCESS CONTROL

**I/O Scan Rate:** 16 ms maximum

**Number of I/O:** 128 combination, input and output

**PDIO Frequency:** 8Hz – 100KHz

**PDIO Voltage:** 5 VDC

**Counter Input Frequency:** PDIO 8Hz – 100K Hz

## ENCLOSURE

**Stainless Steel:** NEMA 4X, IP66 design

**Shipping Weight:** 660/662 7 lbs., 663 47 lbs., 665 13lbs.

## APPROVALS

- NTEP COC# 01-013
- PTB
- CE
- Canadian Weight and Measures AM-5416
- ETL

# OPTIONS

**Analog Output Module:** 0-10 VDC, 20mA, 4-20 mA, optically isolated, Software adjustable zero/gain (8 analog modules max.)

**Multi-scale Module:** allows for simultaneous monitoring of an additional signal input

**I/O Relay Module:** 8 variations of Quad I/O boards. (AC & DC – 4 output, 4 input or 2 in/ 2 / out) only one option mounts inside the enclosure.

**RS485 Module:** Isolated multi-drop with 251 devices max, half or full duplex up to 4000 feet, 56K bps max

**20mA Current Loop:** Isolated TX-Active or Passive, RX-Passive, 9600 bps max, 12VDC, 1000 foot loop

Database: 256K, 1 Meg, 2 Meg RAM, battery backed

**Alpha Keypad:** Elastomeric, available on the 663 only

**SCR Module:** max load 1.75A RMS, 20-280VAC, 50/60Hz

**Dura-shield:** 0.020" layer of weatherable lexan film with adhesive backing, applies to the front of the indicator, keeps display and keypad clean in extreme environments

**Reflash Software:** download firmware enhancements and update

**DeviceNet™:** ODVA approved interface module for fieldbus networking

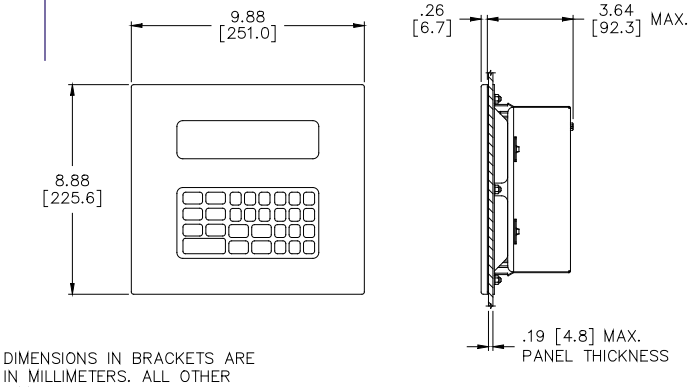
**Profibus®:** PTO approved interface module for fieldbus networking

**Ethernet:** Communication via intranet or internet connection

**STVS:** Severe transient voltage suppressor

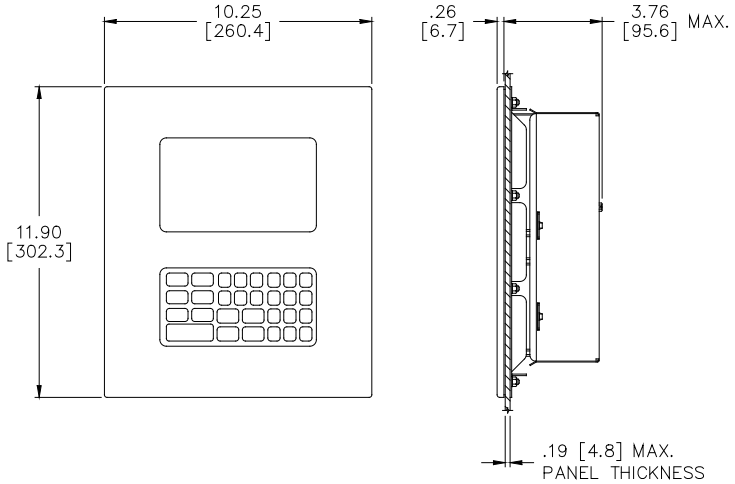
# DIMENSIONS

***660/662 Panel Mount***

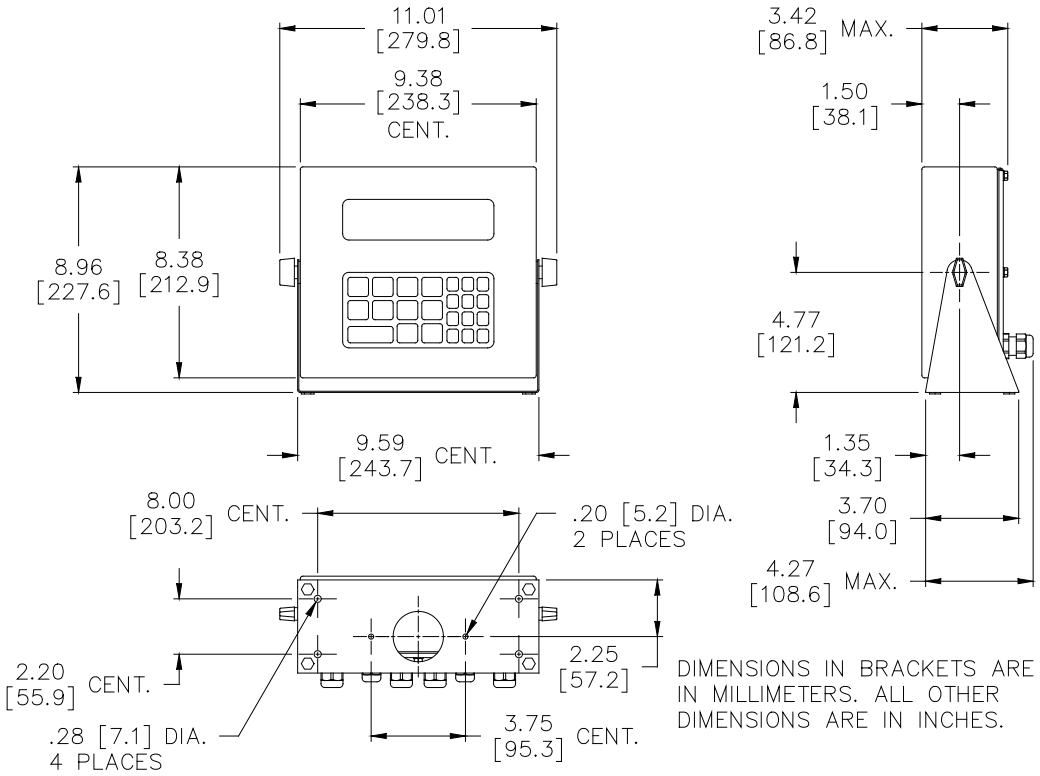



DIMENSIONS IN BRACKETS ARE IN MILLIMETERS. ALL OTHER DIMENSIONS ARE IN INCHES.

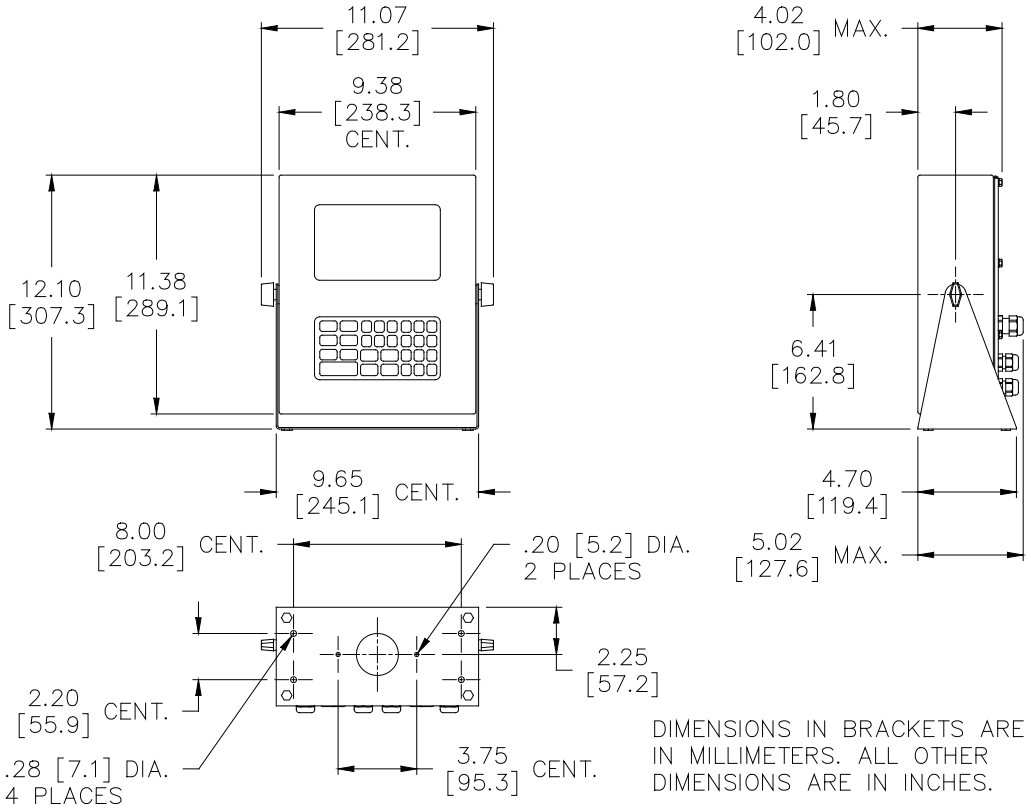
***665 Panel Mount***



***660/662***




***665***

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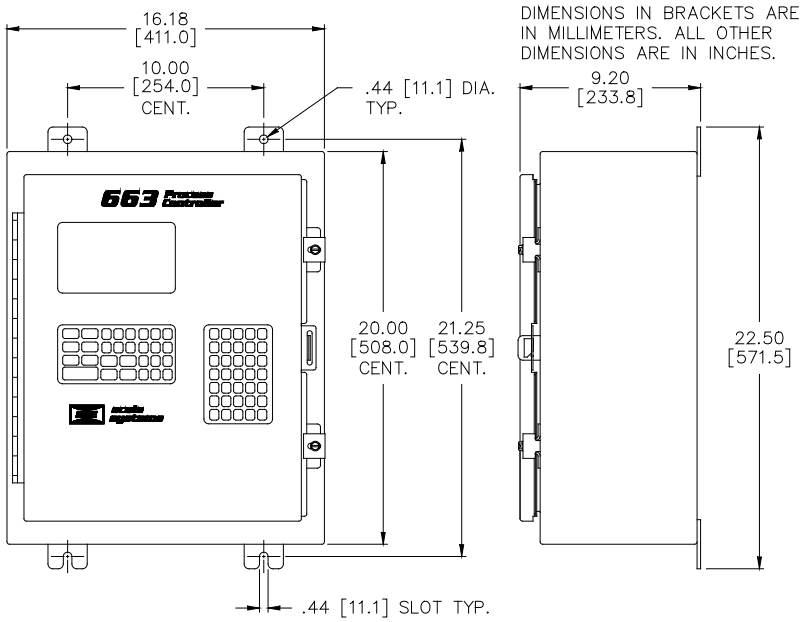
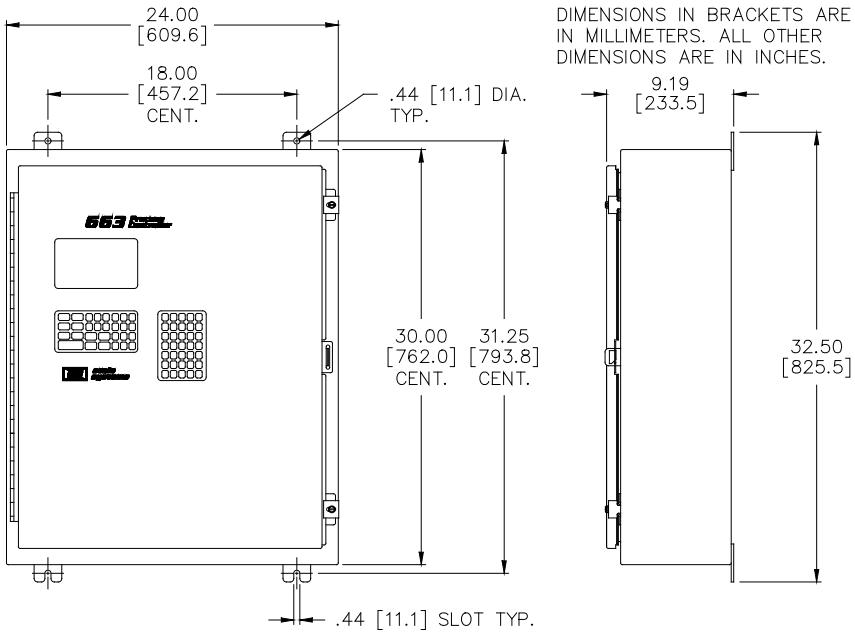
***663 (16 x 20 in)***




***663 (24 x 30 in)***

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