

UMC555 XPCD

Explosion Proof Digital Weight Indicator



PART #	DESCRIPTION
19211	UMC555 XPCD

The UMC555 XPCD is a full-featured explosion proof weight indicator at a very competitive price. The UMC555 XPCD offers the latest in solid state reliability and accuracy, packaged for direct use in Class I and II environments without batteries or trickle charges. UMC555 XPCD indicators are AC powered and feature a bright 0.6" LED display ideal for indoor or outdoor environments.

The UMC555 XPCD model comes complete with R. Stahl® intrinsic safety barriers and can be used with up to 4 350-ohm cells, 8 700-ohm cells, or 10 1,000-ohm strain gauge load cells in Class I, Groups C & D, Class II, Groups E, F & G, or Class III hazardous environments. The unit is also available without barriers for use in Division 2 areas where the customer determines barriers are not necessary.

Applications

- Class I, Division 1 & 2, Groups C & D; Class II, Division 1 & 2, Groups E, F & G and Class III hazardous environments
- Paint plants
- Fertilizer plants

Standard Features

- AC powered, 115 VAC
- Bright 0.6" LED display
- NEMA 4, 7CD, 9EFG enclosure
- Full digital configuration and calibration
- 10,000 displayed graduation, 100,000 internal graduations
- Temperature compensated to comply with NTEP and Canadian guidelines
- Sensitivity to 0.3 μ V/graduation
- External "Zero", "Gross/Net", "Tare" and "Print" explosion proof push buttons
- RFI/EMI shielding
- Full duplex RS-232, simplex RS-232 and current loop
- 10 updates/second conversion rate with adjustable digital averaging and "auto-averaging"
- Includes 2 sealing fittings, packing and cement

Options/Accessories

Options and accessories for the UMC555 XPCD may require additional hardware; consult factory with your application and specification needs.

- Parallel BCD output
- 0-10 VDC analog output
- 4-20 mA analog output
- Breather drain fittings
- Vinyl organisol coating
- Polyurethane coating

LOAD CELL EXCITATION:

±5 VDC, fixed short-circuit proof

LOAD CURRENT:

Suitable for up to 4 350-ohm, 8 700-ohm or 10 1,000-ohm strain gauge load cells

LOAD CELL CABLING:

6-wire with full remote sensing required through the intrinsic barrier system

ANALOG SIGNAL INPUT RANGE:

0.7 mV/V - 2.0 mV/V ("High Span")
1.7 mV/V - 3.2 mV/V ("Low Span")

ANALOG SIGNAL SENSITIVITY:

0.3 microvolts/graduations maximum

TRANSIENT OVERLOAD:

±100 VDC without damage,
100 microsecond duration at 2% duty cycle

UPDATE RATE:

10 updates per second, no averaging

INTEGRATION TIME:

20 millisecond, typical

DISPLAY RESOLUTION:

10,000 displayed grads
100,000 internal grads

DISPLAY INCREMENTS:

1, 2, 5, 10, 20, 50, 100

FULL SCALE CAPACITY:

Programmable 1.0000 x 0.0001 through 999900 x 100

DISPLAY BLANKING:

Overrange blanking occurs at 103% of full scale capacity.
Under-range at -400 displayed graduations, typical

LEAD ZERO BLANKING:

Standard, per NIST H-44 requirements

DISPLAY:

Six decades, 0.6" red LED

POLARITY INDICATION:

" - " sign LED

DECIMAL POINTS:

Keyboard selectable to the right of any active digit

LB/KG SWITCHING:

Via customer supplied switch with conversion for weight and tare values. May be specified instead of Print Switch

EXTERNAL SWITCHES:

Zero, Gross/Net, Tare, Print

ANNUNCIATORS:

Center Zero, Net, lb, kg, Motion (spot LED with white legend)

AZM: (ZERO TRACK)

"Gross" mode only

AZM CAPTURE BAND:

Selectable: "Off", ±0.5, ±1.0, or ±3.0 graduations

AZM APERTURE:

Keyboard selectable to ±1.9% or 100% Full Scale

MOTION BAND:

Keyboard selectable to ±1 or ±3 displayed grads, 1 second delay

POWER INPUT:

115/230 VAC, 50-60 Hz

DISPLAY CHECK:

All digit segments and annunciators sequentially illuminated upon power application

SERIAL OUTPUT:

Standard RS-232 full duplex port; RS-232 simplex port; 20 mA simplex current loop

BAUD RATES:

1200, 2400, 4800, 9600 individually selectable for ports 1 and 2

ENCLOSURE:

Cast aluminum explosion proof housing for Class I, Division 1 & 2, Groups C & D; Class II, Division 1 & 2, Groups E, F & G hazardous environments; NEMA 4, 7CD, 9EFG

CONDUIT ENTRIES:

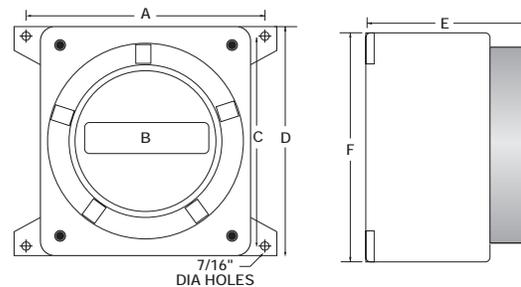
3 @ 3/4" - NPT located in bottom side of enclosure 3.625" from mounting plane and centered on 3.5" centers

WEIGHT:

Approximately 52 lb (23.6 kg)

WARRANTY:

One year limited warranty



DIMENSIONS

A = 12.13" (304.8 mm)	D = 12.0" (304.8 mm)
B = 7.38" (187.3 mm)	E = 8.50" (215.9 mm)
C = 10.75" (273.1 mm)	F = 12.0" (304.8 mm)

CAUTION! The equipment contained within this Explosive Environment section requires greater attention to specification and installation guidelines. Improper specification, installation, or service of these products can result in loss of equipment or serious injury.