

## 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  $\mu$ 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:

Ovrange 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:

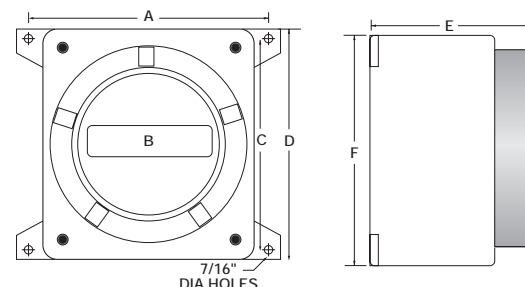
3 @ 3/4" - NPT located in bottom side of enclosure 3.625" from mounting plane and centered on 3.5" centers

## WEIGHT:

Approximately 52 lb (23.6 kg)

## WARRANTY:

One year limited warranty



## DIMENSIONS

A = 12.13" (308.0 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.