# AMELEC
## SIGNAL CONDITIONING

# APM489-3.5-LP Loop Powered Process Meter

- Non-Smart/Non-uProcessor based, type A instrument
- 3.5 Digit LCD High-contrast display
- Suitable for use on 4-20mA Process Input loops
- 12.7mm (0.5") Digits height
- No External Power Supply required – Input Loop Powered
- High precision & stability, Low Volt drop

## Technical Specifications

### Input

4-20mA as std. Loop voltage drop of 2.5V DC will appear across the input terminals.
(1-5mA or 10-50mA input current ranges also available)

### Display

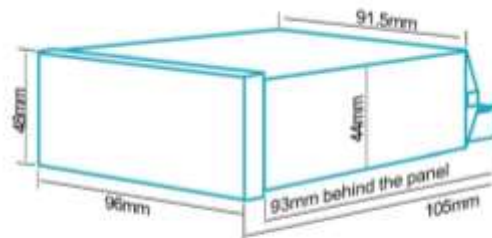A nominal 3.5 Digit LCD High-contrast display with black 12.7mm (0.5") high digits.

The display can be calibrated as either 0 to 100.0% or in Engineering units to suit applications.

Display scaled at factory prior to shipment.

Calibration method: Internal Zero + Span pots.
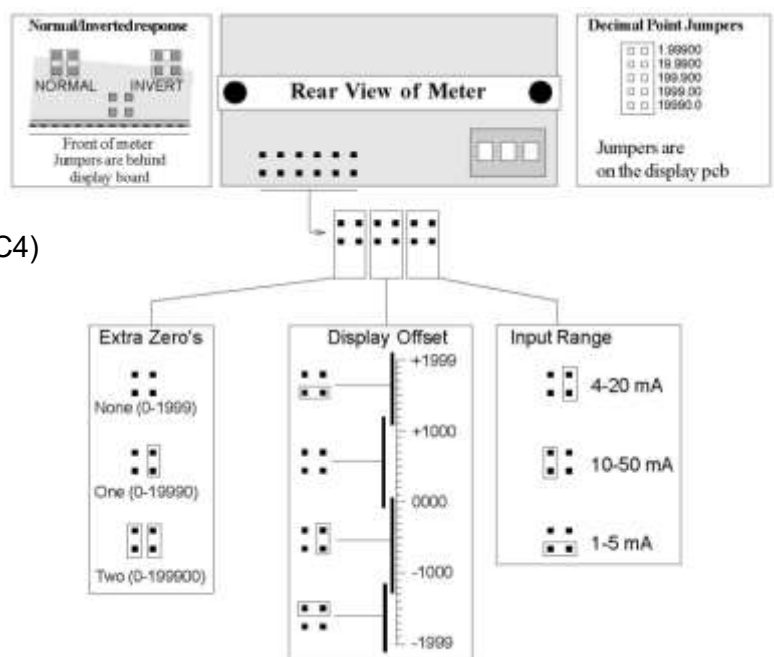Accuracy: < 0.1% of range

Additional jumper switches available to extend the maximum reading on the display up to 19990 or 199900 if desired.

### Environmental Conditions

Storage: -20 to +70℃
Operating: -5 to +50℃
Sealing: All round IP54 as std
(optional IP67 front cover available if required – 'SPC4)

### Connections

## Dimensions



Panel cutout 45mm high x 92mm wide. Weight 250 grammes.
Sealed IP54. For the IP67 optional cover, specify option SPC4.

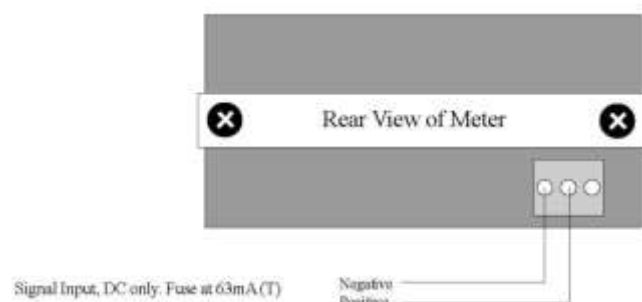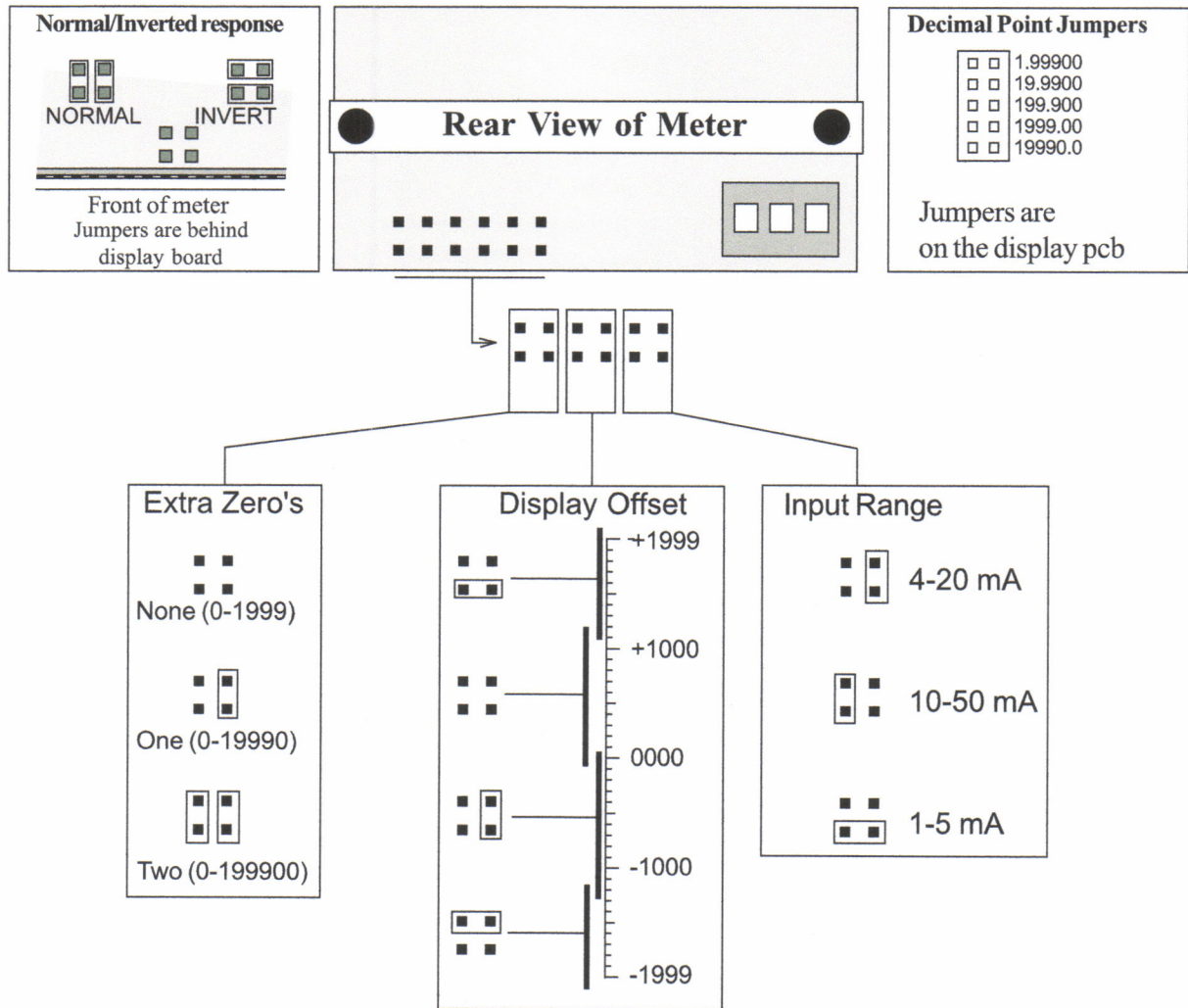## Adjustment & Calibration

# Adjustments & Calibration

You can scale this 3 1/2 digit meter to suit most process measurements. You may add one or two fixed zero's after the active digits. This gives you a X10 or X100 multiplication factor, so you can scale the meter for maximum readings up to 19990 or 199900. You can also scale the meter to act in reverse. For example 4mA = 100.0 and 20mA = 0.0

| Normal/Inverted response | Rear View of Meter | Decimal Point Jumpers |
|---|---|---|

**Normal/Inverted response**

NORMAL        INVERT

Front of meter
Jumpers are behind
display board

**Rear View of Meter**

**Decimal Point Jumpers**

□ □ 1.99900
□ □ 19.9900
□ □ 199.900
□ □ 1999.00
□ □ 19990.0

Jumpers are
on the display pcb

## Extra Zero's

None (0-1999)

One (0-19990)

Two (0-199900)

## Display Offset

+1999

+1000

0000

-1000

-1999

## Input Range

4-20 mA

10-50 mA

1-5 mA

The display offset range is the reading range you can get if you adjust the Zero potentiometer, with the input at 0% (eg 4mA). When you have set all the jumpers, to suit your application, you can calibrate the meter.

Z    S

Zero pot. Adjust this with
0% input signal to
get 0% display value.

Span pot. Adjust this with
100% input signal to
get 100% display value