

### PRODUCT DESCRIPTION

The OEM 1B uses the latest miniaturisation techniques to produce a very compact 3 ½ digit LCD voltmeter. It is designed to be a drop-in component in most medium and high volume applications, ranging from personal instrumentation and integral sensor indicators to measurement probes. The meter features 8mm digit height, 3 decimal points, auto-polarity, auto-zero, 200mV full scale reading and a very low current consumption. Connection to the module is via two dual in line rows of pins.

### FEATURES

- 8mm (0.31") Digit Height
- 200mV d.c. Full Scale Reading
- 150µA @ 7.5 to 14V Operation
- Auto-zero and Auto-polarity
- Selectable Decimal Points
- Very Compact Design



### TYPICAL APPLICATIONS

- Personal Gas Monitoring
- Medical Instruments
- Measurement Probes
- Hand held instruments

### ORDERING INFORMATION

|                |                               |
|----------------|-------------------------------|
| Standard Meter | Stock Number<br><b>OEM 1B</b> |
|----------------|-------------------------------|

### ELECTRICAL SPECIFICATIONS

| Specification                    | Min. | Typ. | Max. | Unit         |
|----------------------------------|------|------|------|--------------|
| Accuracy (overall error) *       |      | 0.1  |      | % (±1 count) |
| Linearity                        |      |      | ±1   | count        |
| Sample rate                      |      | 2.5  |      | samples/sec  |
| Operating temperature range      | 0    |      | 50   | °C           |
| Temperature stability            |      | 100  |      | ppm/°C       |
| Supply voltage (V+ to V-)        | 7.5  | 9    | 14** | V d.c.       |
| Supply current                   |      | 150  |      | µA           |
| Input leakage current (Vin = 0V) |      | 1    | 10   | pA           |

\* To ensure maximum accuracy, re-calibrate periodically.

\*\* Operation of the meter beyond the maximum supply voltage rating may cause permanent damage to the meter.

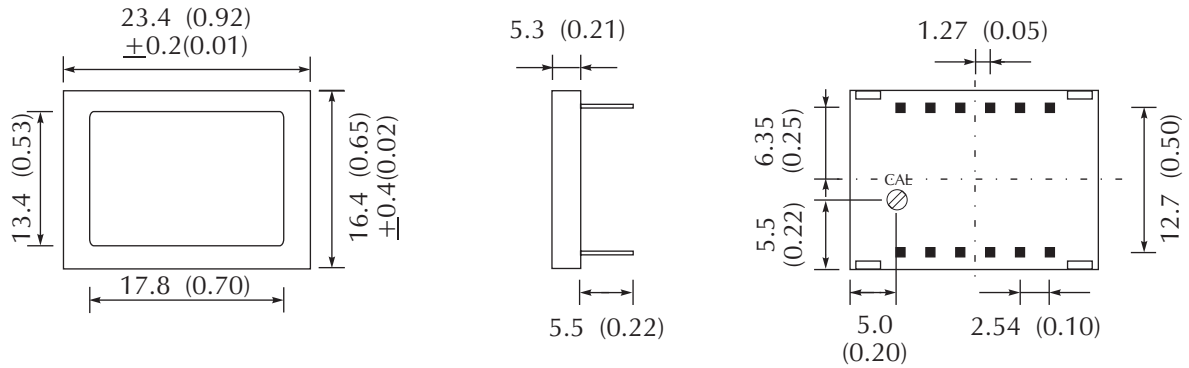
Unless otherwise noted, specifications apply at T<sub>A</sub>=25°C, V<sub>supply</sub>=5Vd.c. (f<sub>dock</sub>=48kHz) and are tested with the module configured for floating input mode.

### SAFETY

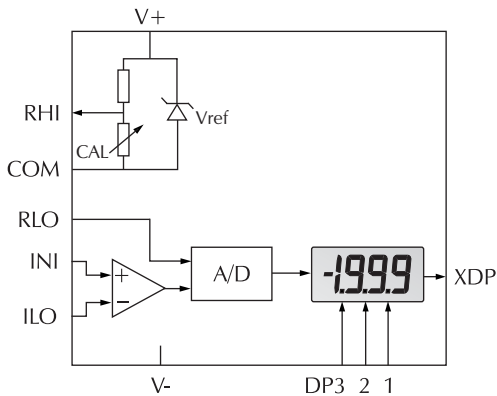
To comply with the Low Voltage Directive (LVD 93/68/EEC), input voltages to the module's pins must not exceed 60Vdc. The user must ensure that the incorporation of the panel meter into the user's equipment conforms to the relevant sections of BS EN 61010 (Safety Requirements for Electrical Equipment for Measuring, Control and Laboratory Use).

### DIMENSIONS

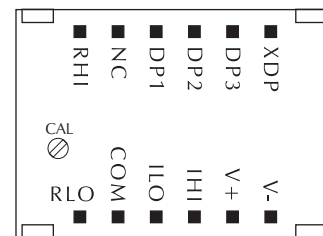
All dimensions in mm (inches)



### FUNCTIONAL BLOCK DIAGRAM



### PIN CONFIGURATION (rear view)



Specifications liable to change without prior warning

OEM 1B

Issue 3

M.C. Applies to OEM 1B/3