

# Blackbox 136

## Technical Specification:



### PHYSICAL: MOUNTING OPTION SPECIFIC:

| Mounting option:                | Standard Wall Mount:   | Large Wall Mount:   |
|---------------------------------|--|---|
| Sensor body dimensions:         | 130 x 150 x 63.5 mm<br>(5.12 x 5.9 x 2.5 in)   | 130 x 180 x 85 mm<br>(5.12 x 7.09 x 3.35 in)                                      |
| Sensor body weight:             | Nominal 0.65kg (1.4lbs)  | Nominal 0.75kg (1.65lbs)  |
| Enclosure material/description: |  | ABS Base with polycarbonate lid,<br>flamability rating UL94HB                     |
| Cable entry detail:             | Underside fitted with 3 x M20, nylon<br>cable glands suitable for 6-12mm<br>cable, two 15mm x 13mm rear<br>knockouts | Underside fitted with 3 x M20, nylon<br>cable glands suitable for 6-12mm<br>cable |

### PHYSICAL: ALL MOUNTING OPTIONS:

|                              |   |
|------------------------------|---|
| Transducer cable extensions: | 2-core screened (2 conductor 20AWG screened)                      |
| Nominal separation:          | 1000m (3280ft) For greater separation distances please contact us |

### ENVIRONMENTAL:

|                                      |  |
|--------------------------------------|--|
| IP Rating:                           | IP66/67  |
| Flammable atmosphere approval:       | All Blackbox units must be mounted in a safe area. Compatible with approved dB Transducers |
| Max./Min temperatures (electronics): | -20 °C to +55 °C (-4 °F to +131 °F)  |

### APPROVALS:

|              |  |
|--------------|--|
| CE approval: | See EC Declaration of Conformity in the manual                                 |
| UL/C-UL:     | UL Listed. UL Listed to Canadian Safety Standards. Certificate Number E257330. |

### PERFORMANCE:

|                       |  |
|-----------------------|--|
| Accuracy/Repeability: | 0.25% of the measured range or 6mm (whichever is greater)                          |
| Resolution:           | dB MACH3 0.25mm, dB3 0.5mm, dB6 and dB10 1mm, dB15 1.5mm, dB25 2.5mm and dB40 5mm. |
| Min. & max. range:    | Dependent on Transducer. Nominally 125mm to 40m (0.41ft to 130ft)                  |
| Rate response:        | Fully adjustable   |
| Echo processing:      | DATEM (Digital Adaptive Tracking of Echo Movement)                                 |

### OUTPUTS:

|                  |   |
|------------------|---|
| Analogue output: | 0 to 5VDC into minimum load 10K $\Omega$ non-isolated (user programmable and adjustable)<br>0.1% resolution |
| Digital output:  | RS232 for programming and data extraction. RS485 providing Profibus DP V0 OR V1 communications              |

### PROGRAMMING:

|                            |  |
|----------------------------|--|
| On-board programming       | Via RS232 using supplied software, via integral keypad |
| PC programming:            | Via Passcode (user selectable and adjustable)          |
| Programming security:      | Via non-volatile RAM                                   |
| Programmed data integrity: | Via RS232 using optional handheld calibrator           |

### DATA LOGGING (VIA OPTIONAL CSO LOG SOFTWARE)

|                  |                                |
|------------------|--------------------------------|
| Memory Capacity: | 192Kbytes 28 days @ 5bytes/min |
| Memory Type      | Non-volatile memory            |

### REMOTE COMMUNICATOR:

|               |   |
|---------------|---|
| Power supply: | Power supplied via Blackbox RS232 interface |
|---------------|---|

### SUPPLY:

|               |  |
|---------------|--|
| Power supply: | 10-28V DC 10W maximum power (typically 5W) |
|---------------|--|

*Pulsar Process Measurement Ltd. operates a policy of constant development and improvement and reserves the right to amend technical details as necessary.*

Literature No. U3-D-0817

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