

# BLACKBOX

## Technical Specifications:

Blackbox 130 is a compact low-cost intelligent controller that offers non-contacting level measurement. The unit features a 4-20mA output proportional to level and two alarm or control relays.



### PHYSICAL: MOUNTING OPTION SPECIFIC

Mounting Option:	Standard Wall Mount:	Large Wall Mount:
<b>Controller Body Dimensions:</b>	130 mm x 150 mm x 63.5 mm (5.12 in x 5.9 in x 2.5 in)	130 mm x 180 mm x 85 mm (5.12 in x 7.09 in x 3.35 in)
<b>Weight:</b>	Nominal 0.65 kg (1.4 lb)	Nominal 0.75 kg (1.65 lb)
<b>Enclosure Material/Description:</b>		ABS Base with polycarbonate lid, flammability rating UL 94 HB
<b>Cable Entry Detail:</b>	Underside fitted with 3 x M20, nylon cable glands suitable for 6 mm to 12 mm (0.24 in to 0.47 in) cable	Underside fitted with 3 x M20, nylon cable glands suitable for 6 mm to 12 mm (0.24 in to 0.47 in) cable
<b>Transducer Cable Extensions:</b>	2-core screened (2 conductor 20 AWG screened)	
<b>Nominal Separation:</b>	1,000 m (3,280 ft), for greater separation distances please contact us	

### ENVIRONMENTAL

<b>IP Rating:</b>	IP66/67
<b>Max. &amp; Min. Temperature (Electronics):</b>	-20 °C to +55 °C (-4 °F to +131 °F)
<b>Flammable Atmosphere Approval:</b>	All Blackbox units must be mounted in a safe area. Compatible with approved dB Transducers
<b>CE Approval:</b>	See EU Declaration of Conformity in the manual
<b>UL Approval:</b>	UL Listed. UL Listed to Canadian Safety Standards. Certificate Number E257330.

### PERFORMANCE

<b>Accuracy/Repeatability:</b>	0.25% of the measured range or 6 mm (0.24 in), whichever is greater
<b>Resolution:</b>	dBMA3 0.25 mm (0.01 in), dB3 0.5 mm (0.02 in), dB6 and dB10 1 mm (0.04 in), dB15 1.5 mm (0.06 in), dB25 2.5 mm (0.1 in), and dB40 5 mm (0.20 in).
<b>Min. &amp; Max. Range:</b>	Dependent on Transducer. Nominally 125 mm to 40 m (0.41 ft to 130 ft)
<b>Echo Processing:</b>	DATM (Digital Adaptive Tracking of Echo Movement)
<b>Rate Response:</b>	Fully Adjustable

### OUTPUTS

<b>Analog Output:</b>	Isolated output of 4-20mA or 0-20mA into 1K $\Omega$ (user programmable and adjustable) 0.1% resolution
<b>Digital Output:</b>	RS232 for programming and data extraction
<b>Volt Free Contacts, Number, &amp; Rating:</b>	2 form "C" (SPDT) rated at 2 A at 240 V AC
<b>Display:</b>	2 x 12 alpha numeric

## PROGRAMMING

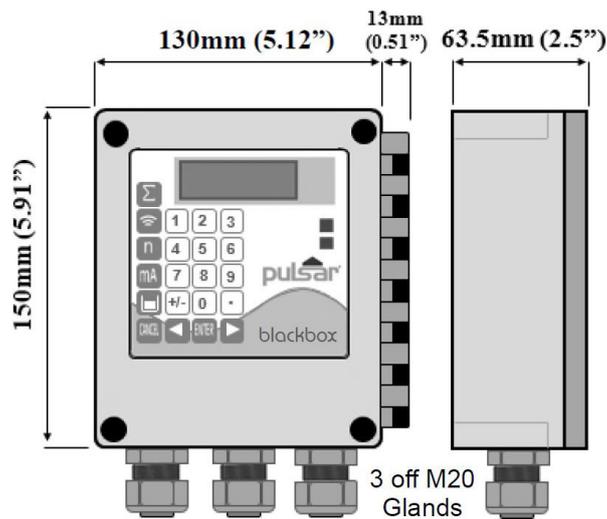
<b>On-board Programming:</b>	Via RS232 using supplied software
<b>PC Programming:</b>	Via RS232 using supplied software
<b>Programming Security:</b>	Via Passcode (user selectable and adjustable)
<b>Programmed Data Integrity:</b>	Via non-volatile RAM
<b>Remote Programming:</b>	Via RS232 using optional handheld calibrator

## SUPPLY

<b>Power Supply:</b>	115 V AC +5% / -10% 50/60 Hz, 230 V AC +5% / -10% 50/60 Hz, 10-28 V DC, 10 W maximum power (typically 5 W)
<b>Fuses:</b>	50 mA at 230 V AC, 100 mA at 115 V AC

## REMOTE COMMUNICATIONS

<b>Power Supply:</b>	Power supplied via Blackbox RS232 interface
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Blackbox Drawing Front and Side



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