AQUALABO
Smart water solutions

ULTRA 4
ULTRASONIC FLOWMETER
FOR OPEN CHANNELS

APPLICATION

• WWTP (open channel flow and level, storage tank level)
• Sewer networks monitoring
• Stormwater overflows (self-monitoring)
• Aquaculture (discharge)

AQUALYSE
BY AQUALABO

The Ultra 4 flowmeter / linimeter is a stationary ultrasonic flowmeter.

Compact and easy to install, it provides reliable flow measurement of your venturi flumes and other weirs.
The Ultra 4 can be programmed either by the integrated keypad (supplied as standard on all wall or built-in units), via the SD card slot, or by PC via the RJ11 serial interface.
All parameters are stored in non-volatile memory and are therefore retained in the event of a power failure.
Programming is simple thanks to its integrated height-flow conversion tables for standard or non-standard structures.
Equipped with an integrated micro SD card slot as standard, for quick and easy access to data storage and analysis (.csv format).
The Ultra 4 can measure from zero (blanking distance) to 40m from the face of the controller to the measured surface, depending on the associated sensor chosen.
Relays can be programmed to activate alarms, pump starts or other control equipment. Equipped with an isolated 4-20mA output, it can be connected to a recorder or a RTU.

The backlit graphic display of the box allows you to display:
• The level / flow as well as a percentage
• Trend history
• Echo profiles

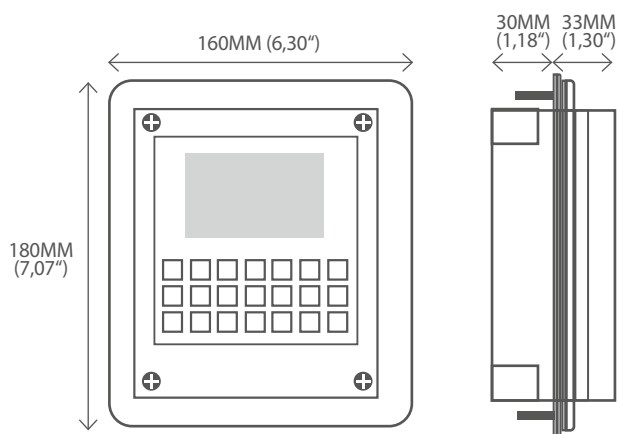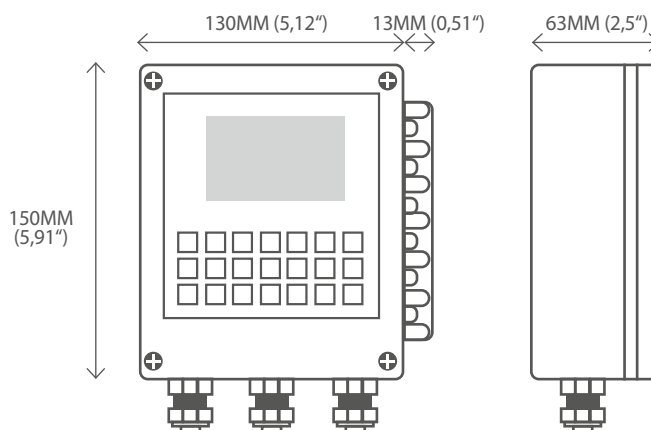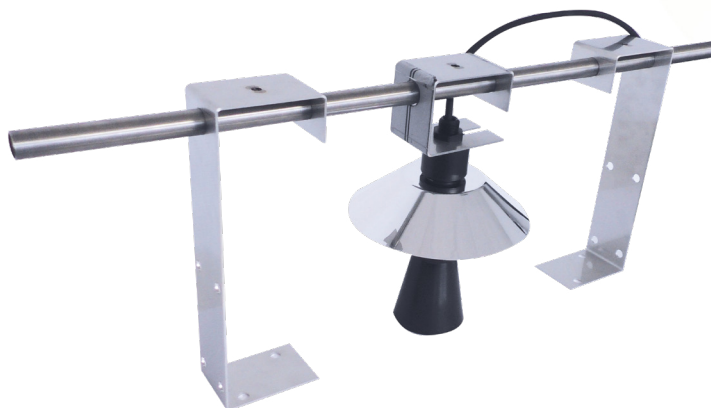| PHYSICAL	
Mounting options	Standard Wall Mount or fascia mount
Dimensions	- Wall mount : 150 mm x 130 mm x 63.5 mm - Fascia mount : 160 mm x 180 mm x 63 mm
Weight	700g
Enclosure Material	Polycarbonate, flame resistant to UL94-V0
ENVIRONMENTAL	
IP rating	IP 65 (wall mount) et IP 64 (fascia mount)
Max. & Min. Temperature (Electronics)	-20 ºC to +50 ºC
Power supply	100-240 V AC 50/60 Hz. DC 10-28 V
Power consumption	AC = 20 VA MAX, DC = 10 W max
Certification	CE
UV rating	UL746C F1
PERFORMANCES	
Accuracy	0.25% of the measured range or 6mm (whichever is greater)
Resolution	0.1% of the measured range or 2mm (whichever is greater)
Input	1 ultrasonic doppler echo sensor125 KHz
Analog output	1 4-20 mA isolated
Digital output	1 half-duplex RS232
UV rating	4 configurable for pulse proportional to the flow rate or thresholds
PROGRAMMING	
On-board Programming	Via Integral Keypad
PC Programming	Via IntegralVia RJ11 port on unit, or via SD Card slot
Programming security	Via passcode (user selectable and adjustable)
Programmed storage	Via non-volatile RAM, plus backup
Data Logging and Removable Storage	Via Micro SD card slot or internal 10-day totaliser logs (flow only)
Storage temperature	-40° to +80°C

DIMENSIONED DRAWINGS

Fascia mount version

Wall mount version

SENSOR	
Technology	Ultrasonic doppler echo
Temperature Compensation	Yes, built-in to sensor
Accuracy / half angle of emission / Frequency	1 mm / 6° / 125 kHz
Distance min	0,00 m
Operating temperature	- 40 °C to + 90 °C
Dist cable (standard, max)	5 m / 1000 m • Diametrt 8 mm
Weight / Dimensions	0,7 Kg • 75 mm x 184 mm + sunscreen 180 mm diameter
Fixing	Boss M20 or 1"NPT, max thickness 8 mm

Ultrasonic sensor

Fixing bracket option available