



ULTRA 4

Technical Specifications:

Ultra 4 offers the sophistication and advanced features of the rest of the Ultra range in a compact, cost-effective package and useful new features that make it even easier to set up and fine-tune. The Ultra 4 can be programmed for level, volume, open channel flow, and pump control applications. It also features 4 relay outputs, programmable for alarm or control, and a multifunctional display. Setup and configuration is easy with the integral keyboard or local connection to a PC.



PHYSICAL: MOUNTING OPTION SPECIFIC

Mounting Option:	Standard Wall Mount:	Fascia Mount:
Controller Body Dimensions:	150 mm x 130 mm x 64 mm (5.9 in x 5.1 in x 2.5 in)	160 mm x 180 mm x 64 mm (6.3 in x 7.1 in x 2.5 in)
Weight:	Nominal 700 g (1.5 lb)	Nominal 700 g (1.5 lb)
Enclosure Material / Description:	Polycarbonate, flame resistant to UL94-V0	Polycarbonate, flame resistant to UL94-V0
Cable Entry Detail:	3 x M20 glands	
Transducer Cable Extensions:	2-core screened (minimum)	
Maximum Separation:	1,000 m (3,280 ft), 500 m (1,640 ft) for dBR16 & dBR8	

ENVIRONMENTAL

IP Rating:	IP67/NEMA 4X (Standard), IP64 (Fascia)
Max. & Min. Temperature (Electronics):	-20 °C to +45 °C (-4 °F to +113 °F)
Flammable Atmosphere Approval:	For installation in non-flammable area only. Most compatible transducers suitable for flammable atmospheres. See sensor / transducer datasheet or brochure.
UV Rating:	UL746C F1
CE Approval:	See EU Declaration of Conformity
UL Approval:	UL 61010-1. cULus listed. Certificate number E257330.

PERFORMANCE

Accuracy:	0.25% of the measured range or 6 mm (0.2 in), whichever is greater. 2 mm (0.01 in) for dBR16 mmWAVE RADAR.
Resolution:	0.1% of the measured range or 2 mm (0.08 in), whichever is greater
Max Range:	Dependent on application and transducer (maximum 40 m (131.2 ft) dB40)
Min Range:	Dependent on application and transducer (minimum zero dBMACH 3)
Rate Response:	Fully Adjustable

PROGRAMMING

Onboard Programming:	By integral keypad
PC Programming:	Via Integral RJ11 port on the unit, or via Micro SD. Also via HART DTM (HART option required).
Programming Security:	Via passcode (user selectable and adjustable)
Programmed Storage:	Via non-volatile memory
Data Logging & Removable Storage:	Via Micro SD card slot or internal 10-day totalizer logs (flow only)
SD Card Memory (Included):	32 GB

ECHO PROCESSING

Description:	DATeM (Digital Adaptive Tracking of Echo Movement)
Technologies:	Ultrasonic and FMCW RADAR

OUTPUTS

Analog Output:	Isolated (floating output (to 150 V) of 4-20mA or 0-20mA into 1 kΩ (user-programmable and adjustable)
Digital Output:	Full Duplex RS232
Volt-free Contacts, Number, & Rating:	3 x SPCO isolated relays, rated at 5A at 250 V AC and 1 Solid-state SPNO isolated relay, rated 30 V at 100 mA, suitable for pulse counter applications
Display:	Monochrome graphical dot-matrix, 160 x 240 pixels. Fully programmable display options with an integral keypad with menu navigation keys.

SUPPLY

Power Supply:	100-240 V AC 50/60 Hz. DC 10-28 V
Power Consumption:	AC = 20 VA MAX, DC = 10 W max
Fuses, Mains:	1A 'T' 20 mm (0.8 in) ceramic 1500A breaking
Fuses, Transducer:	100 mA barrier type, 4000A breaking

COMMUNICATIONS (OPTIONAL)

Modbus RTU / ASCII:	Isolated RS485
Profibus DPV1:	Isolated RS485
HART:	Additional, isolated 4-20mA output. DTM available for level and volume applications. Open channel flow and pump control applications not currently supported.

Ultra 4 wall-mount dimensions

Ultra 4 fascia-mount dimensions

