PULSAR
MEASUREMENT

ULTRA 5

Technical Specifications:

Ultra 5 offers the ultimate flexibility in ultrasonic control and measurement. Ultra 5 is user-configurable to measure level or volume, provide advanced pump control or measure open channel flow to BS ISO 1438 and 4359. Including five assignable relays with extra alarm options such as pump efficiency, pump control functions, storm and aeration control and many more!

PHYSICAL: MOUNTING OPTION SPECIFIC

Mounting Option:	Standard Wall Mount:	Fascia Mount:	Rack Mount:	Panel Mount:
Controller Body Dimensions	235 mm x 184 mm x 120 mm (9.3 in x 7.2 in x 4.7 in)	200 mm x 112 mm x 108 mm (7.9 in x 4.4 in x 4.3 in)	10 HP X 160 mm D x 3U 128.5 mm H (6.3 in x 5.06 in)	72 mm W x 144 mm H x 176 mm D (2.8 in x 5.7 in x 6.9 in)
Weight:	1 kg (2.2 lb)	1.3 kg (2.9 lb)	0.8 kg (1.7 lb)	1.4 kg (3 lb)
Enclosure Material / Description:	Polycarbonate, flame resistant to UL91	Stainless steel back, Polycarbonate UL94-V0 front and bezel	Aluminum Frame	ABS
Cable Entry Detail:	10 cable entry knock outs 5x M20, 1 x M16 underside 4 x 18 mm (0.7 in) dia (PG11) at rear	N/A	N/A	N/A
Enclosure Protection:	IP65	IP64	None	IP65 Optional

PHYSICAL: ALL MOUNTING OPTIONS

Transducer Cable Extensions:	2-core screened
Maximum Separation:	Up to 1,000 m (3,280 ft)

ENVIRONMENTAL

Max. And Min. Temperature (Electronics):	-20 °C to +50 °C (-4 °F to +120 °F)

APPROVALS

CE Approval:	Listed in the Certificate of Conformity within the manual
Flammable Atmosphere Approval:	Safe area: compatible with approved dB transducers

PERFORMANCE

Accuracy / Repeatability:	0.25% of the measured range or 6 mm (0.2 in), whichever is greater
Resolution:	0.1% of the measured range or 2 mm (0.08 in), whichever is greater
Min. & Max. Range:	0 mm to 40 m (0 in to 131.2 ft). Dependent on sensor used. Ability to measure 50 m (164 ft) with dB50 when modified.
Rate Response:	Fully adjustable
Echo Processing:	DATEM (Digital Adaptive Tracking of Echo Movement)

OUTPUTS

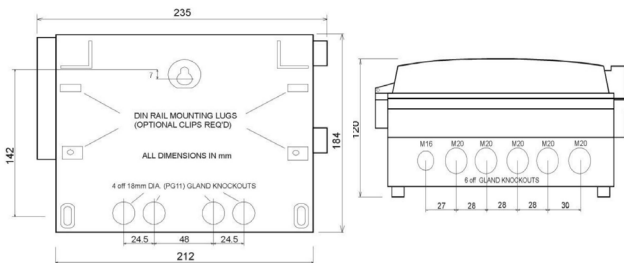|	
Analog Output:	Isolated (floating) output (to 150 V) of 4-20mA or 0-20mA into 500 Ω (user programmable and adjustable) 0.1% resolution
Digital Output:	Full Duplex RS232
Volt Free Contacts, Number & Rating:	5 form "C" (SPDT) rated at 5 A at 240V AC
Display:	6 digits plus 12 character text, plus bar graph with direction indicators, remote communicator identifier and program / run / test mode indicators

INPUTS

Analog Input (Optional):	Isolated (floating) input (to 150 V) 4-20mA or 0-20mA source, open circuit voltage 33 V, 22 V at 4mA, 14 V at 20mA (user programmable and adjustable) 0.1% resolution

PROGRAMMING

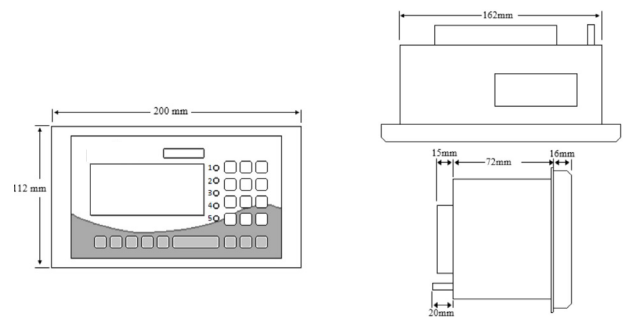|	
On-Board Programming:	By integral keypad
PC Programming:	Via RS232
Programming Security:	Via passcode (user selectable and adjustable)
Programmed Data Integrity:	Via non-volatile RAM, plus backup
Rack & Panel Remote Programming:	Via optional infra-red communicator (requires 2 x AA alkaline batteries)

SUPPLY

Power Supply:	105 V AC +5% / -10% 50/60Hz, 230 V AC +5% / -10% 50/60Hz, 18-36 V DC, 10W maximum power (typically 6 W)
Fuses:	100mA at 170-240 V AC, 200mA at 85-120 V AC

Ultra 5 Wall Mount and Gland Knockouts

Ultra 5 Fascia Mount Drawings Front, Top and Side

Rev 4.0