



# 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:          | DATM (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

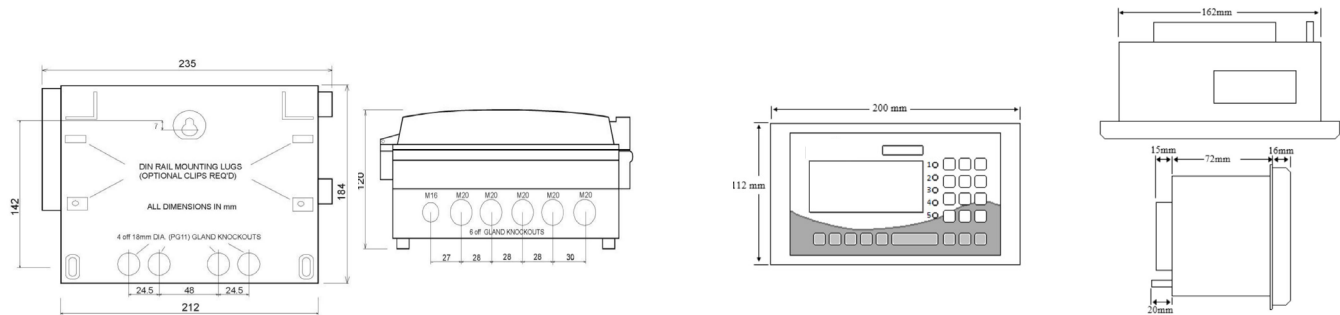
|                          |   |
|--------------------------|---|
| Analog Input (Optional): | Isolated (floating) input (to 150 V) 4-20mA or 0-20mA source, open circuit voltage 33 V, 22 V at 4mA, 14 V at 20mA (user programmable and adjustable) 0.1% resolution |
|--------------------------|---|

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



Delivering the Measure of Possibility

INFO@PULSARMEASUREMENT.COM

Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.

Copyright © 2020 Pulsar Measurement  
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX  
Registered No.: 3345604 England & Wales

**United States**  
11451 Belcher Road South  
Largo, FL 33773  
+1 888-473-9546

**Canada**  
16456 Sixsmith Drive  
Long Sault, Ont. K0C 1P0  
+1 855-300-9151

**United Kingdom**  
Cardinal Building, Enigma  
Commercial Centre  
Sandy's Road, Malvern WR14 1JJ  
+44 (0) 1684 891371