

Temporary literature

PULSAR^{ultra}

Advanced 122



PULSAR
Process Measurement

The Pulsar Advanced 122 provides non contacting, maintenance-free control and indication of level using the time of flight, through air, ultrasound technique.

The Advanced 122 provides cost effective level control from one unit for two similar points of measurement, it has 5 user definable relays for alarm and full control functions.

The unit has been designed for maintenance-free fit and forget performance required within the waste water industry.



Advanced 122
level and differential measurement system

The Pulsar Advanced 122 utilises the very latest echo extraction algorithm called DATEM (Digital Adaptive Tracking and Echo Mapping). This is an entirely new digital technique developed especially for the Pulsar *ultra range*. It gives the system an edge in identifying the "true target level" in the face of competing echoes from unwanted obstructions.

When coupled with the powerful dB range of transducer, the Advanced 122 provides cost effective and reliable performance in liquid applications. A choice of wall, fascia, rack or panel mounting configurations is available with standard features such as back lit LCD displays and knock out cable entries.

System features

- Two 4-20mA isolated outputs assignable to various functions.
- Two working depths to be the same
- Can display level, space, distance, differential, average or any combination of two points of measurement.
- Full information back lit display showing level and flow.
- 5 user definable relays.
- Operator friendly menu driven set up.

The Advanced 122 requires limited set up and is operator friendly by utilising the easy Pulsar standard menu driven routine.

There are two isolated analogue outputs that can be assigned to either point of level measurement or to space, or distance, average or differential.

Five control relay setpoints can be assigned to level, differential, average, various alarm functions. or a switching point for screen control.

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Technical Specification : **PULSAR** *Ultra Advanced 122*



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Physical

Outside dimensions (wall mount)	240 x 184 x 118
Weight	Nominal 1Kg
Case material/description	Polycarbonate, flame resistant to UL94-V2
Transducer cable requirements	Extended with twin screened
Maximum separation	500M
Cable entry detail	10 cable entry knockouts, 5xPG11 , 1xPG9, 4xPG11 at rear

Options

Fascia Mount	See technical update sheet TU001-Z
Rack Mount	10HP x 160mm deep x 3U (128.5mm) high
Panel Mount	72mm wide x 144mm high x 176mm deep

Enviromental

IP Rating (Wall Mount)	IP65
Optional IP rated fascia mount	IP64
Max & min temperature (electronics)	-20 deg C to 60 deg C
Flammable atmosphere approval	Safe area: compatible with approved dB transducers (see transducer spec sheet)
CE approval	EMC approval to BS EN 50081-1:1992 for emissions and BS EN50082-2:1995 for immunity and to BS EN61010-1:1993 for low voltage directive.

Performance

Accuracy	0.25% of the measured range or 6mm (whichever is greater)
Resolution	0.1% of the measured range or 2mm (whichever is greater)
Max. range	Up to 15 meters dependent on transducer
Min. range	Dependent upon transducer
Reading response	Fully adjustable

Echo processing

Description	Patented DATEM (D igital A daptive T racking of E cho M apping)
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Outputs

Analogue output	2 Isolated output of 4-20 mA or 0-20 mA into 500 ohms 0.1% resolution. (user programmable)
Digital outputs	full Duplex RS232
Volt free contacts, number and rating	5 form C (SPDT) rated at 5A at 240V ac
Display	6 digits plus 12 character text, plus bargraph with direction indicators and program/run/test mode indicators

Programming

On –board programming	Integral keypad
PC programming	Via RS232 (RJ11 port)
Programming security	Via password (user selectable and adjustable)
Programmed data integrity	Via non-volatile RAM, plus backup

Supply

Power Supply	115V ac + 5% / - 10% 50/60 Hz,
	230V ac + 5% / - 10% 50/60 Hz, dc 18 –36V