

This versatile system offers 10-point monitoring in a single unit. It can be used in a wide range of applications to scan liquids, solids or a combination of both contained in vessels of differing size, shape and configuration up to 60m (200 ft.).

The XPL Plus uses ultrasonic technology to measure level, space, distance, volume or average/differential. Transducers can be mounted up to 365 m (1200 ft.) from the monitor. It features patented Sonic Intelligence® software for superior reliability. Readings are displayed in user-selectable linear engineering units on the LCD.

It will connect to a DCS or PLC using Milltronics SmartLinx® interface modules, giving you remote 2-way communication and full parameter access. Modules for popular industrial buses can be factory installed or added later to meet changing needs. No external gateway is required, reducing hardware and cabling costs.

Technical Specifications

Power

- 100/115/200/230 Vac ±15%, 50/60 Hz, 15 VA

Environmental

- location: indoor/outdoor
- altitude: 2000 m max.
- ambient temperature: -20 to 50°C (-5 to 122°F)
- relative humidity: suitable for outdoor (Type 4X/NEMA 4X/IP65 enclosure)
- installation category: II
- pollution degree: 4

Scan Points

- 10 points per AiRanger XPL Plus max., frequency independent

Range

- level measurement: 0.3 to 60 m (1 to 200 ft.) max.

Accuracy

- 0.25% of range or 6 mm (0.24"), whichever is greater

Resolution

- 0.1% of program range* or 2 mm (0.08"), whichever is greater

Memory

- EEPROM (non-volatile) no back-up battery required

Programming

- via removable programmer or optional Dolphin Plus

Display

- 51 X 127 mm (2 x 5") custom graphics LCD

Enclosure

- Type 4X/NEMA 4X/IP65, polycarbonate

Weight

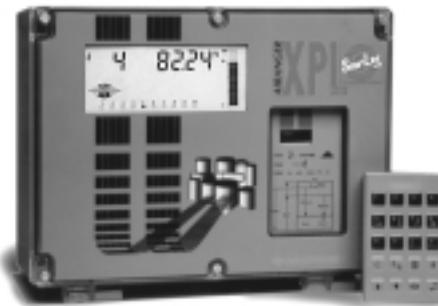
- 2.7 kg (6 lb.)

Temperature Compensation

- -50 to 150°C (-58 to 302°F)
- integral transducer sensor
- 1 TS-3 temp. sensor (expandable to 10 inputs with optional TIB-9 card)
- programmable fixed temperature

Temperature Error

- with compensation: 0.09% of range
- fixed temperature: 0.17%/°C deviation from programmed temperature



Product Features

- Non-contacting technology is low maintenance
- Automatic level-to-volume conversion for standard or custom tank shapes
- Dolphin Plus and SmartLinx® compatible
- Easy to install, easy to program with removable infrared keypad

Outputs

Transducer drive

- 150 to 315 V peak (transducer model dependent)

mA

- AO-10: 0.1% resolution, 0/4 to 20 mA, scalable, 750 Ω max. load, isolated, 30V rms

Relays:

- SAM-20: 20 alarm/control relays
- 1 form 'C' SPDT contact per relay, rated 5 A at 250 Vac, non-inductive

Transducer

- compatible models: ST-H and Echomax series models XPS-10/10F, XPS-15/15F, XPS-30, XPS-40, XLT-30, XLT-60, XLS-60, XCT-8, XCT-12, XRS-5 and XKS-6

Cable

- co-axial to be RG62-A/U low capacitance
- signal to be 2-3 copper conductors, twisted, with foil shield, drain wire, 300V 0.5 – 0.75 mm² (22 – 18 AWG)
- relay/power to be copper conductors per local requirements to meet 250V 5A contact rating

Options

Temperature Sensor

- TS-3

Expansion Card

- TIB-9, increased TS-3 inputs from 1 to 10

Communications

- SmartLinx: protocol specific modules for interface with popular industrial communication systems
- Dolphin Plus: Milltronics Windows® - compatible interface and infrared ComVerifier link
- BIC-II: XPL Plus bi-polar communication current loop to remote RS-232 or RS-422 port

Peripherals

- 3 peripherals per XPL Plus max.
- AO-10, Analog Output Module (1 max.)
- SAM-20, Satellite alarm module (2 max.)
- BIC-II buffered interface converter (1 max.)

Approvals

- CE**, CSA_{NRTL/C}, FM

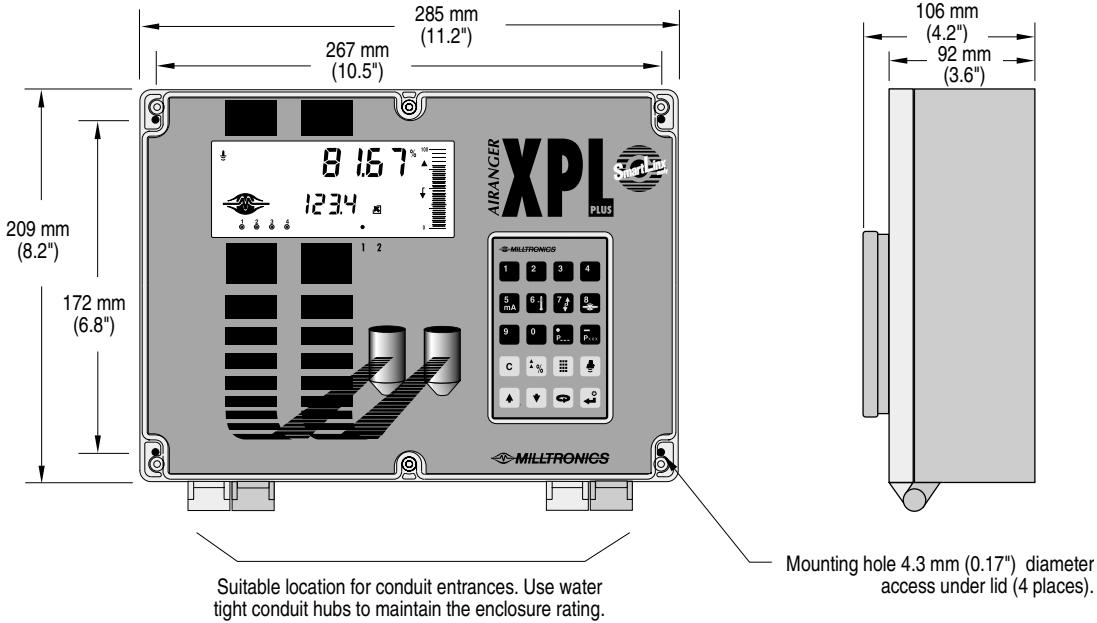
* Program range is defined as the empty distance to the face of the transducer (P006) plus any range extension (P801).

**EMC performance available upon request.

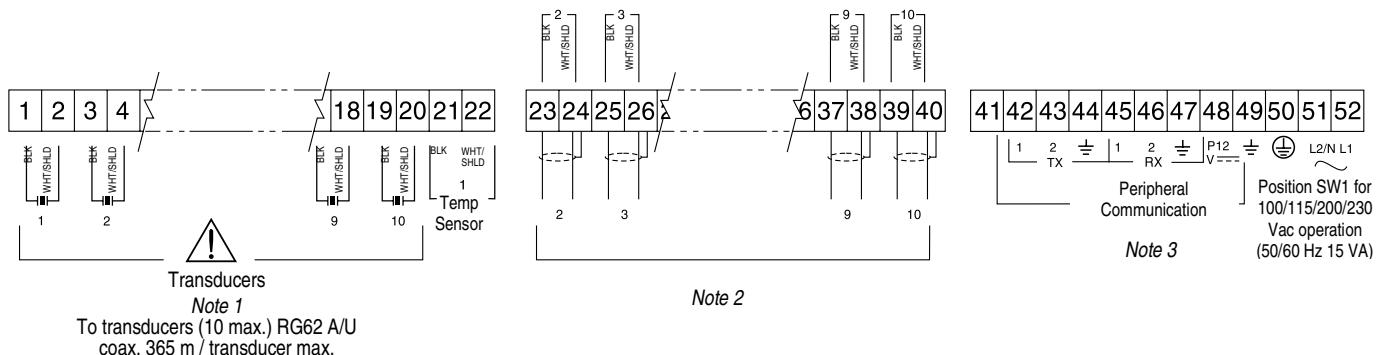
Specifications are subject to change without notice.

AiRanger XPL Plus

Dimensions



Wiring



Notes

- Transducers must be run in a grounded metal conduit separate from other wiring (except TS-3 temperature sensor wiring, if applicable).
- Optional TIB-9 card for multiple temperature sensors. Do not jump the terminals if TS-3's are not used.
- The XPL Plus is compatible with the following Milltronics peripherals:
 - SAM 20: relay satellite alarm module
 - A0-10: analog output module
 - BIC-II: converts the bi-polar communication current loop to remote RS-232 or RS-422.

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