

# 4100-LEV Level-Ease Monitor

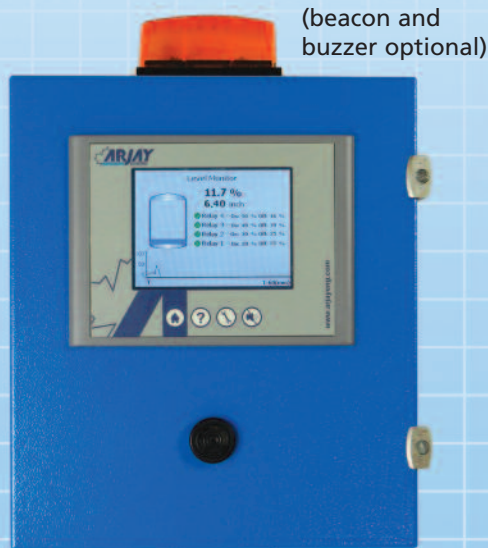


## Continuous level monitoring of liquids and bulk solids

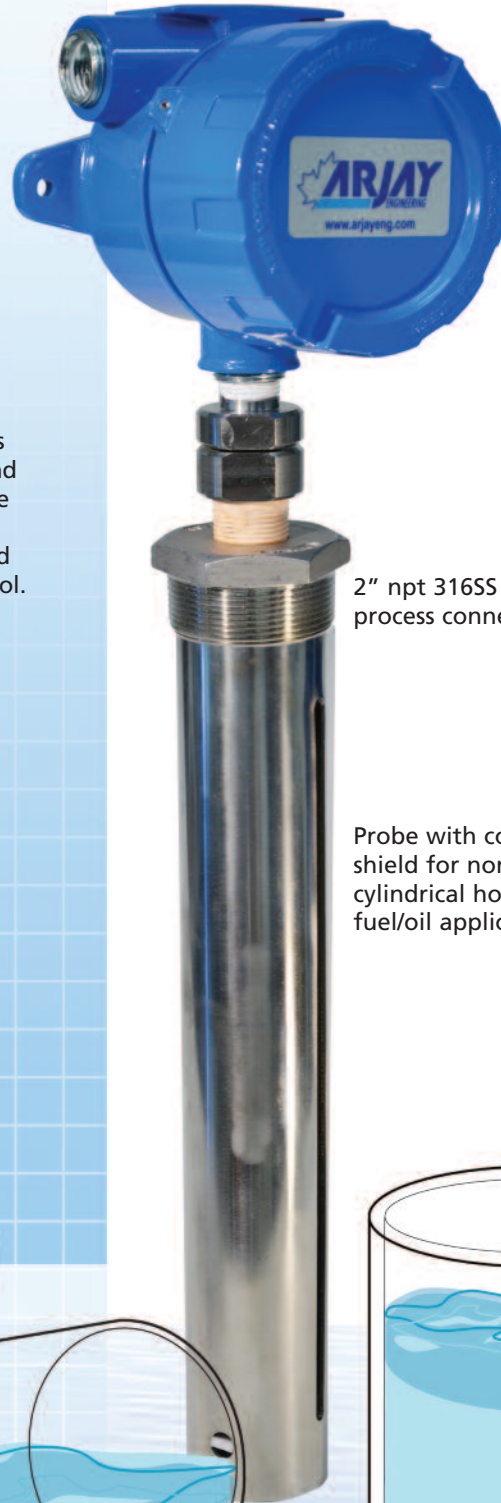
Over 40 years of Arjay's field proven HF capacitance experience has been applied to the Level-Ease 4100 series monitors. This unique level system provides complete flexibility for monitoring one or more tanks in one complete package.

- unique capacitance approach eliminates routine cleaning
- no moving parts
- control and interface panel mounts safely away from the process

The Level-Ease 4100 sensing probe monitors the capacitance field between the probe and it's concentric shield of the tank wall. As the level of product increases, the probe capacitance changes. This level signal is used to provide outputs, displays and relay control.



up to 1 km



2" npt 316SS  
process connection

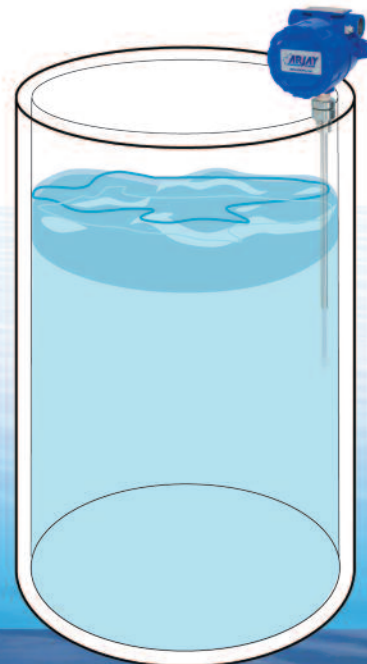
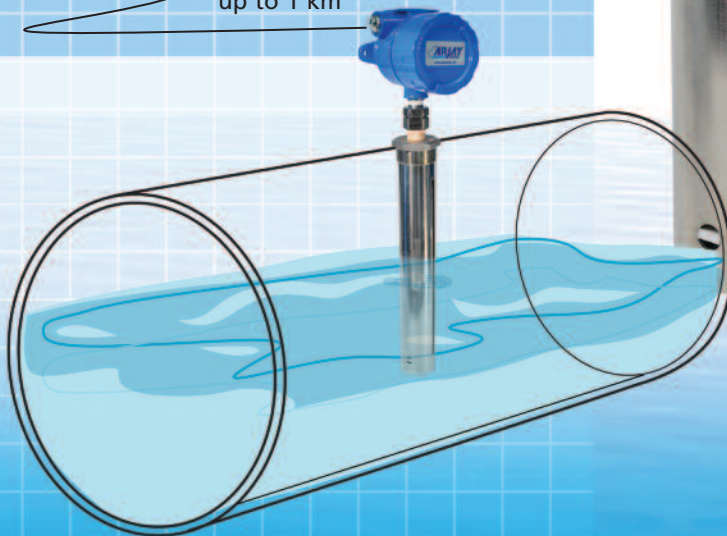
explosion proof  
probe



3/4" npt 316SS  
process connection

Probe with concentric  
shield for non-metallic,  
cylindrical horizontal or  
fuel/oil applications

Probe shown with  
inactive sheath



# 4100-LEV

## Features and Benefits

- no moving parts
- remote electronics via standard twisted pair
- all set-up, calibration and diagnostics are accessed at the control panel
- all control wiring and interface is done at the control panel
- HF capacitance technology does not require routine cleaning
- touch screen interface for easy set-up and user interface
- tank view display for ease of reading
- trend display of hour, day or month increments

## Optional Interfaces

Analog Output 4-20 mA non-isolated  
Communication RS-485 Modbus

## Technical Specifications - Control Panel

Operating Temp. 0°C to +55°C  
Resolution .04 pF at 1,000 pF  
Accuracy 0.2% of full scale pF  
Power Input 24 vdc or 80-240 vac +/-10%, 1P, 50-60 HZ  
Display touch screen full colour tank view graphics, % and engineering units of level  
selectable trend line view or none  
Relay Outputs four SPDT, 10 amp @ 240 vac, dry  
Enclosure Type 4 metal painted blue / IP 66  
optional Type 4X SS or polycarbonate

## Technical Specifications - Probe

Process Temp. -60°C to +200°C  
Ambient Temp. -40 C to +55 C  
Pressure 103 bar/10342 kPA/1500psi  
at stable temperature  
Process Connection available threaded or flanged  
Wetted Parts 316SS and Teflon

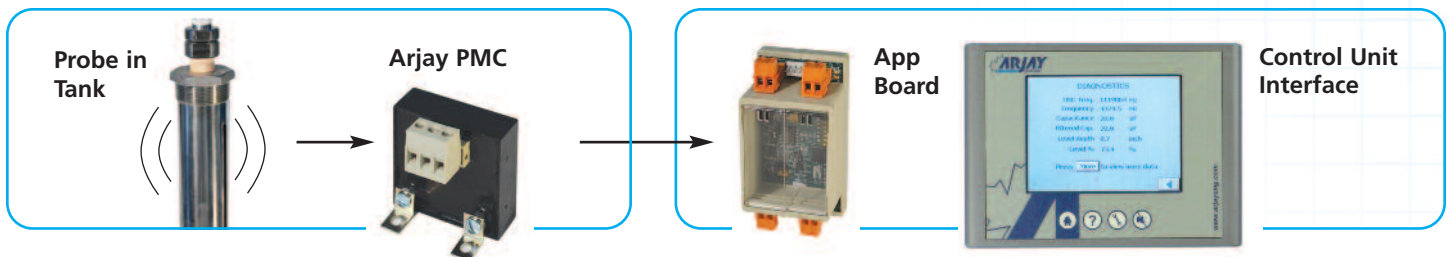
### Certifications (certificates available on website)

**Included Standard on Control Unit and Probe - Ordinary Location Use**  
UL/CSA/IEC 61010-1  
CAN/CSA 22.2  
CE

**Included Standard on Probe - Hazardous Location Use - Explosion Proof**  
USA/Canada CSA Zone 1,2; AEx db IIC T5 Gb  
IECEx/ATEX Zone 1,2; Ex db IIC T5 Gb

**Optional on Probe - Hazardous Location Use - Intrinsically Safe**  
UL/CSA/IEC 60079  
ANSI/UL 913-2013  
Class I; Division 1,2; Groups A,B,C,D; T4  
Class II; Division 1,2; Groups E,F,G  
Class III; Division 1,2  
Class 1, Zone 0,1,2; Ex ia IIC T4 Ga

**Included Standard on Probe**  
CRN # 0F07450.2 (all provinces)  
NACE MR-0175 Compliant where applicable



## Probe Assembly

The Arjay PMC (pulse module circuit) installed at the probe converts the tank signals to a frequency pulse. This allows the controller to be safely mounted up to 1 km away from the tank with virtually no loss to signal stability. No operator interface is required at the probe using this unique Arjay PMC design.

## Control Panel

All calibration, control interface and power wiring is done at the main control unit. The touch screen provides a simple menu-driven operator interface and display.

The Arjay App board is the heart of the 4100-LEV. This board monitors and controls the signals from the tank probe, applies the appropriate calibration algorithms and interfaces this information to the touch screen and PLC hardware.



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