

# 2852-DPM Dry Pump Monitor



## Pipe monitoring for dry conditions to protect pumps and equipment

Over 40 years of capacitance experience stands behind the 2852-DPM pipe monitor. The unique in-line sensor continuously monitors for the change from a wet to dry condition or a liquid change from one dielectric to another.

- capacitance technology responds to any liquid type
- no moving parts
- remote alarm unit mounts safely away from pipe
- no intrusion into stream flow

The 2852-DPM sensor monitors a cross sectional area of the pipe and locks in on the capacitance field of the fluid passing through. A change toward a dry condition or a liquid of a different dielectric will upset the capacitive field and initiate an alarm.

The sensing plates are embedded into a wafer flange which provides monitoring without any intrusion into the stream flow.

Optional Intrinsically Safe Sensor



PVC sensing flange (150# ANSI configuration)

up to 1 km

optional alarm light and/or buzzer



Remote Electronics available in painted steel, SS or polycarbonate enclosure



# 2852-DPM

## Features and Benefits

- wafer flange sensor for easy installation
- adjustable time delay and sensitivity to eliminate nuisance alarms from bubbles
- remote electronics via standard twisted pair
- Sensor available Intrinsically Safe for Hazardous Locations
- PVC wetted parts for corrosive environments
- capacitance technology responds to all types of liquids
- non-intrusive sensor design does not restrict flow

## Technical Specifications - Control Unit

Operating Temp.	-20°C to 55°C
Resolution	.04 pF at 1,000 pF
Accuracy	.2% of setpoint
Power Input	12 vdc or 24 vdc or 100-240 vac +/- 10%
Alarm Relay	Two common 3 amp SPDT dry contacts
Analog Output	4 mA normal/20 mA alarm
Communication	Modbus RS-485
Enclosure	Type 4/IP 66 painted steel or Type 4X/IP 66 polycarbonate or SS
Optional	Light, buzzer, beacon

## Technical Specifications - Sensor

Operating Temp.	-60°C to +55°C
Wetted Parts	PVC (optional PVDF)

### Certifications (certificates available on website)

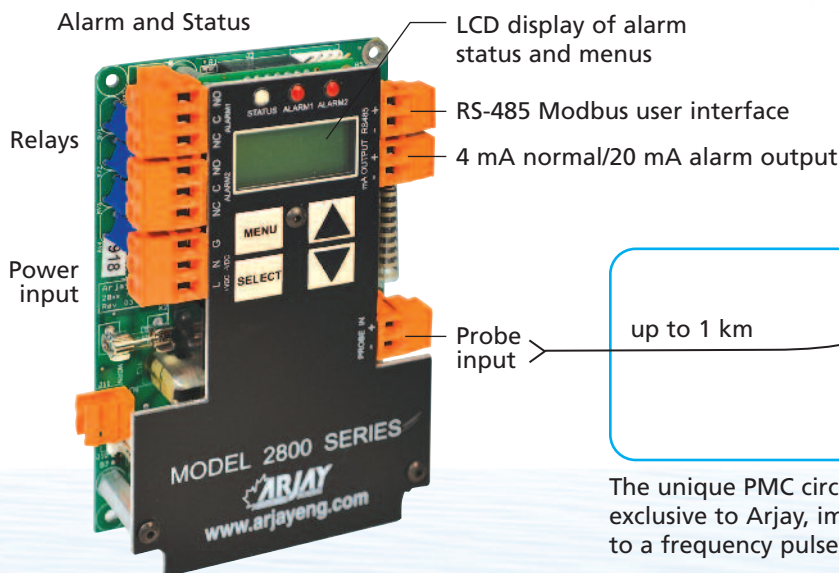
#### Included Standard on Control Unit and Sensor - Ordinary Location Use

UL/CSA/IEC 61010-1  
CAN/CSA 22.2  
CE

#### Optional on Sensor for Hazardous Location Use

(Intrinsic Safety Barrier must be ordered in control unit)

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



The unique PMC circuit design, installed at the probe and exclusive to Arjay, immediately converts the sensor signal to a frequency pulse for furtherance to the controller.



Arjay Engineering

2851 Brighton Road Oakville, Ontario Canada L6H 6C9

<http://www.arjayeng.com>

telephone: +1 905-829-2418

N. America toll free: 1-800-387-9487

fax: +1 905-829-4701