

AWARE-APS

AWARE is a drop in replacement electronic flow switch module that is fully compatible with the QDT-Tensor MWD system and the APS Rotary Pulser. It incorporates RIME’s rugged AWARE three axis vibration sensor with its proprietary processing algorithms and extensive configurability. It provides robust vibration based flow sensing and replaces legacy pressure based sensors while simultaneously allowing seamless integration between the APS Rotary Pulser and a QDT-Tensor Compatible MWD String.

AWARE-APS is designed to allow reliable, repeatable and accurate detection of drilling fluid flow past the MWD tool. The use of the three axis vibration sensor coupled with low noise power supplies and amplifiers allows for accurate detection of PUMPS OFF/ON conditions in challenging environments such as low flow volume, highly deviated or horizontal wells.

FEATURES AND BENEFITS

- Tri Axial Vibration Sensor
- Low noise detection system. ~3mGee noise floor@40Hz
- Axes used, thresholds and delays configurable
- Proprietary detection algorithm
- 150C rated. Survivable to 185°C
- <2mA current draw
- 6V to 40V

Specifications	
Makeup Length	2" Long x 1.875" Diameter (50.8mm Long X 47.6mm Diameter)
Input Voltage	6V to 40V (20-30V recommended)
Power Consumption	<2mA
Shock Limit	1000g, 1.0msec, ½ sine all axes
Vibration Limit	5-30Hz@1in double amplitude, 30-500Hz 20g all axes
Operating Temperature	0° to 150°C (32° to 302°F)
Survival Temperature	-40° to 185°C (-40° to 365°F)

Data Stored in Memory
Total Power On Time
Total Circulating Time
Job Power On Time
Job Circulating Time
Flow Switch Configuration Variables
Manufacturing and Tracking Variables

