

aware is a drop in replacement electronic flow switch module. it incorporates a rugged three-axis vibration sensor, proprietary processing algorithms and provides extensive configurability.

aware 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 the trouble free detection of pumps off/on conditions in challenging environments such as low flow volume, highly deviated or horizontal wells, independent of the rotational position of the downhole tool.

aware is integrated into **rime's flow interface program** which provides access to device configuration, testing features and also allows access to performance and operational data stored in internal memory.

aware is available in multiple packages, including a bare board format, a chassis format or integrated into a bulkhead to allow for easy integration. contact **rime** for specifications on chassis and bulkhead form factors.

specifications—bare board

board size	2.00" x 0.80" x 0.38" (50.8mm x 20.3mm x 9.7mm)
operating voltage	6-40V (20-30V recommended)
power consumption	~2mA
operating temperature	32° to 347°F (0° to 175°C)
shock rating	1000g, 0.5ms, ½ sine, 10 times, all three axes
vibration rating	5-30Hz@1in double amplitude, 30-500Hz 20grms all axes

- tri-axial vibration sensor
- low noise detection system, ~3mg noise floor at 40hz
- thresholds, delays, and axes highly configurable
- proprietary vibration processing and detection algorithm
- 175°C rated, survivable to 185°C
- <2ma current draw
- 6V to 40V input range

