## downhole technologies

### top mount pulser

**argus** is **rime's** patented top mount pulser solution and is designed to provide exceptional performance in demanding drilling applications. optimized to create large pulse amplitudes across a wide range of flow rates and mud weights, **argus** allows for reliable mud pulse telemetry at very low pulse widths in deep and extended lateral drilling applications.

**argus** is a hydraulically assisted lifting knob style pulser and has very low power requirements due to the use of **rime's** patented rotary shear servo valve pulser design, the same technology employed in our proven **slick-hd** servo pulser. the rotary shear servo valve design provides exceptional performance in high solids and high lcm environments. **argus** minimizes pressure loss through the **slick-hd** derived servo module, thus allowing for greater forces to be imparted to the main valve assembly, enabling faster pulse widths at high pulse amplitudes. the wiping and cutting action of the rotary shear valve clears away any compacted debris and ensures unobstructed flow through the system in the most challenging and contaminated environments.

**argus** is highly modular and shares most of its components with **rime's slick-hd** pulser, including the pulser driver, motor and the high torque magnetic coupling assembly. customers who already own the **slick-hd** servo pulser can leverage their existing assets effectively to maximize their return on investment. modifying a **slick-hd** servo pulser to become the **argus** top mount pulser requires very few parts and roughly an hour of time.

argus and its slick-hd components are compatible with rime's pulser interface box and pulser interface program providing extensive memory logging, performance tracking, analysis and reporting capabilities.

- second generation high wear rotary shear servo valve
- rugged and wear resistant main valve
- piston compensated and magnetically coupled drive
- exceptional performance in high lcm environments
- 175°C, 20,000 psi rated
- extensive memory logging and configurability

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### specifications

specifications	
nominal length	63.55″ (1614.17mm) with kintec connector
available collar sizes	5.00", 6.75" and 8.00"(127 mm, 171.45mm and 203.2mm )
operating voltage range	15-40VDC (20-35V recommended)
power consumption	~3mA standby, ~125mA*sec/pulse @ 28V (~3.5 joules/pulse)
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
pressure rating	20,000 psi (137,895kPa)
operating pulse widths	0.188-2.000 s
flow switch	integrated three axis, solid state with high configurability
memory	8MB non volatile memory with event and statistical data logging

#### patents

the product or products described in this document and their features are protected under US10392931, US09133950, CA2890097, GB2523489 and CN104884738.

