

# KEYDRILL BOTTOM MOUNT PULSER GEN3 (BMP-G3)

## Overview:

KeyDrill Bottom Mount Pulser Gen3 (BMP-G3) encodes MWD telemetry into a sequence of pressure surges (positive pulse) in the mud column by restricting mud flow through a reciprocating poppet. The tool is fully retrievable and replaceable. The BMP-G3 is a drop in replacement, bottom mount, servo pulser module that is fully compatible with the QDT-compatible MWD system. It incorporates cutting-edge technologies to achieve significant improvements in performance.

The BMP-G3 is available with Piston or Bladder style oil compensation based on the customer's preference. Combined with servo motor technology, the KeyDrill BMP-G3 has excellent power efficiency and offers more accurate control than the legacy QDT solenoid pulser.

## Features:

- High power efficiency and accurate motor control.
- Improved battery life.
- Strong torque and force to make sure tools can work in harsh environments such as high LCM.
- 3-axis flow detection and adjustable flow switch.
- Strong circuit protection and EMI cancellation for superior reliability.
- Compatible with most Mud Pulse MWD Systems.
- Fully interchangeable Piston and Bladder Compensator sections.
- On board memory records pulser status, power consumption and environment conditions for later analysis.
- Unique firmware that responds to downhole tool issues.
- The electronics section can be configured to accommodate a gamma sensor.

## Specifications:

Min Flow Rate: . . . . . 35 gpm (8 L/sec) in water  
Max Flow Rate: . . . . . 1,100 gpm (67 L/sec) in water  
Operating Temperature: . . . . . -40°C to 175°C  
Max Hydrostatic Pressure: . . . 20,000 PSI (137.9 MPa)  
Operating Voltage: . . . . . 20-38V  
Nominal Current: . . . . . 12mA  
Shock: . . . . . 1,000G / 0.5 millisecond  
Vibration: . . . . . 20g RMS 30-500 Hz Random  
Mud Sand Content: . . . . . <1% recommended  
Poppet Push/Pull Force: . . . . . >100 lbs  
Output Flow Switch: . . . . . 0-5VDC  
Power Consumption: . . . . . 400 hours per  
29V Lithium Battery

Length (End to End) & Weight:  
Standard: . . . . . 51.5" (1,308mm) / 25 lbs (11.3 kg)  
With Gamma: 66.2" (1,681.48mm) / 33 lbs (14.9 kg)  
Housing Diameter: . . . . . 1.875" OD