



ABS-16-GP1-00 Model
(50mm O.D.)

ABS-16-GP1-01 Model
(33mm O.D.)

ABS-16-GP1 Series

Absolute Magnetic Encoder

2017 Brochure
Rev 1.



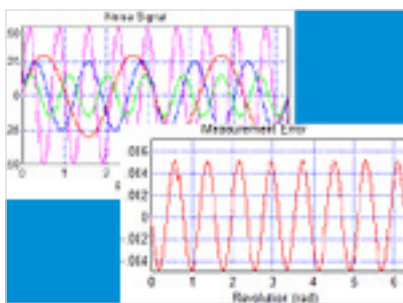
Magnetic type sensor, combined with reliability.

A magnetic actuator is mounted onto the machine or motor shaft, then multiple Hall sensors are mounted around the magnet to read the shaft position. All elements of the encoder are rugged, and sensitivity to shock, vibration and dust/dirt is very low.

The ABS-16 encoder calibrates the sensor's readings in real-time to optimize the resolution and accuracy. Maintaining highest reliability no matter the operating conditions. Disturbance from external magnetic or electrical noise are effectively cancelled out by the encoders calculation.

Features

- Robust, non-contact magnetic sensor
- 16-bit resolution, single-turn.
12-bit accuracy
- 100µs position update frequency
- RS485 4-wire Interface (SN75176)
- Proprietary 1.875Mbps 4-byte packet protocol
- 32 byte eeprom memory
- -30 °C ~ 100 °C operating temperature
- High mounting tolerance. High shock/vibration resistance
- High immunity against external magnetic and electrical noise



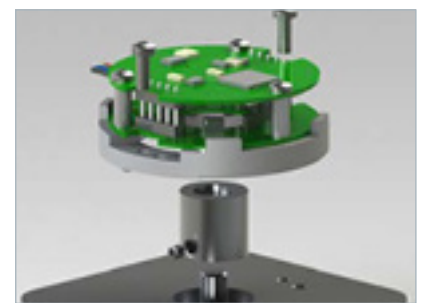
Real-Time Optimization

Significant development time is spent making sure the encoder's calculation algorithm can effectively minimize external disturbance and non-linear real world conditions.



Dedicated Controller

Sensor input and position data calculation is handled by proprietary IC, allowing fastest calculation speed, efficient use of resources and minimal external components.



Simplified Structure

A simple, compact design contributes to reliable operation, ease of mounting and low cost.

