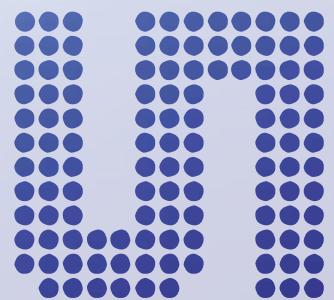


Small & Low Power

www.ams.com/AS5050A

www.ams.com/AS5055A



AS5050A – Smallest 10-bit Magnetic Rotary Position Sensor

AS5055A – Smallest 12-bit Magnetic Rotary Position Sensor

- High resolution: 10-bit / 12-bit
- Low power consumption – ideal for battery powered devices
- Immune to external magnetic stray fields
- Small size: 4 x 4mm QFN package

We provide innovative analog solutions to the most challenging applications in sensor and sensor interfaces, power management, and wireless.

General Description

The AS5050A/AS5055A is a single-chip magnetic rotary position sensor IC with low voltage and low power features. It includes 4 integrated Hall elements, a high resolution ADC and a smart power management controller. The angle position, alarm bits and magnetic field information are transmitted over a standard 3-wire or 4-wire SPI interface to the host processor. The AS5050A/AS5055A is available in a small QFN 16-pin 4x4x0.85mm package and specified over an operating temperature of -40 to +85°C.

Applications	Features
<ul style="list-style-type: none"> - RC-Servo motor control - Robotics - Rotary knobs - Rotary Position Sensor for battery operated portable devices 	<ul style="list-style-type: none"> - 10-bit (AS5050A) / 12-bit (AS5055A) resolution - 3μA current consumption in low power mode - Immune to external magnetic stray fields - Interrupt indication for availability of new data - QFN-16 4x4 package - SPI interface, 3 or 4 wire

AS5050A/AS5055A Block Diagram	Benefits
	<ul style="list-style-type: none"> - Precise and reliable absolute angle measurement - Very low power consumption - High reliability sensing in harsh environments - Synchronization between microcontroller and sensor - Ideal for small and compact designs - Easy to use with SPI interface