

AS38-H39X SERIES

39-bit Single-Turn and Multi-Turn Absolute Encoder Family



The AS38-H39E-Sxxx is a multi-turn absolute encoder series with 39-bit resolution (23-bit single-turn and 16-bit multi-turn). The AS38-H39E-Kxxx is a housed encoder consisting of a patterned disk, a light source, and photosensitive elements that translate mechanical motion to electrical signal. The -Sxxx series come with preloaded SSI communication protocol supported by a full duplex line transmission drive (RS-485), offering good noise immunity to enable a robust data transmission up to 1 Mbps in harsh industrial environments.

The key advantage of the AS38-H39E-Sxxx is that the multi-turn tracking circuitry does not need a battery as its power is generated by the Wiegand-based energy harvesting technology. Also, the gearless multi-turn counting does not have gear wear-out or acoustics noise issue typically encountered in conventional gear based multi-turn encoders. Comparing to other multi-turn encoders with batter backup, the AS38-H39E-Sxxx does not have down time associated with periodic maintenance of the battery backup components. Intended for industrial applications, the product incorporates an ESD protection circuitry meeting Class 3 ESD immunity per IEC -61000-4-2 standard and is also compliant with IP50 per IEC 60529 standard.

KEY FEATURES

- 39-bit resolution: 16-bit energy harvesting multi-turn & 23-bits optical single-turn
- Alarm features with CRC and alarm status bits
- Built in with SSI mode communication protocol
- Overall encoder outer diameter of Ø38 mm and maximum height of 40 mm
- Supports 8mm diameter of blind hollow shaft
- 5K bits of user accessible memory in E2PROM



Product image AS38-H39x Series

APPLICATION EXAMPLES

- Robotics
- Factory Automation
- Linear Positioning System
- CNC Machine Tool
- Medical and Lab Equipment
- Wind Turbine