

Description

The ImmE4096 magnetic encoder module is designed to provide digital quadrature encoder feedback for high volume, limited space applications. The ImmE4096 is designed to be a drop-in replacement for disc encoders by offering higher maximum speed and increased output drive. The module benefits from the TLE5012BE1000 microchip produced by Infineon technology.

Retention

The ImmE4096 encoder module is connected using a 6-conductor, high-polarized 1.25mm pitch connector, mating cables and connectors pinout page.

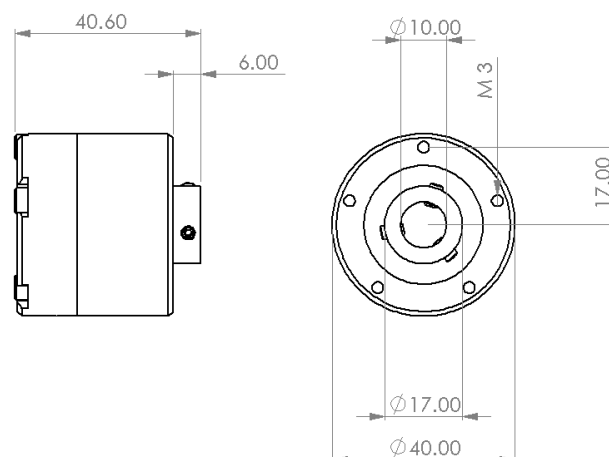
The ImmE4096 encoder module is best suited for BLDC motor applications.

The sensor has been widely used and tested in different robotics-related applications which require it to be functional in severe vibration and temperature conditions.

Features

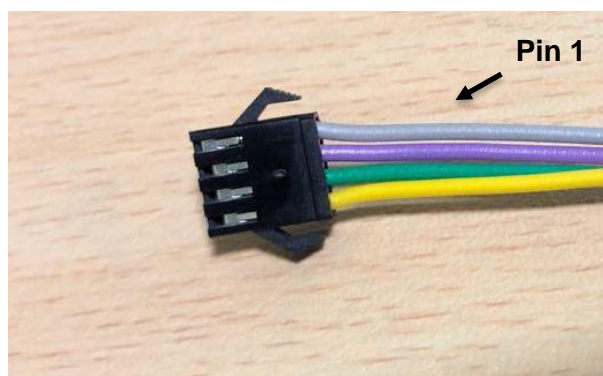
- 4096 pulses per cycle (12-bit resolution).
- Incremental A/B mode Interface.
- Single +5V supply
- On-board debugging LEDs (Signal A and B).

Drawings



Pin-out

The connector type is a 1.25mm pitch connector as shown in the picture below.



Pin	Description
1	Pin A
2	Ground
3	Pin B
4	+5VDC power

Environment and Electrical Parameters

Parameter*	Value			Units
	Min.	Typ.	Max.	
Operating Temperature	-40		150	C°
Supply Voltage**	3.0	5.0	5.5	V
Supply Current		14	16	mA
Low-level output**			1.0	V
High-level output**		Vdd		V
Output Rise Time			130	nS
Output Fall Time			130	nS

* For more information about the encoder IC visit: <http://www.infineon.com/>

** With respect to Ground