Magnetic Absolute Multi-Turn Encoder



- Absolute Position
- Pulse Generator
- No Bearings or Moving Discs
- Separate Rotating Magnet
- Sine-Cosine Technology
- · Low Battery Indication
- Custom Molded

Product Description

The BTR proprietary encoder was developed to accommodate the need to control motor torque in real time and provide absolute position after a power loss. We combined modern sine-cosine technology, decades of door control experience and current molding processes to produce the ultimate position sensor for doors and gates.

Operating Conditions				
Parameter	Symbol	Min	Max	Unit
DC Supply Voltage	VDD	10	30	V
Operating Current ¹	I _{max}		40	mA
Readout Rate		4		Msec
Maximum Turns ²			65535	
Resolution	R _{max}		1.4	^O (degree)
Pulse Output Voltage	VP_{out}	VDD	– 1.0	V
Pulse Output Current	IP out		100	mA
Battery Life ³	B _{life}		6	Years
Operating Temp.	Toperating	-20	+85	οС
Storage Temp	T _{storage}	-55	+85	οС
Max. Speed	S_{max}		TBD	

¹ Max current is dependent on VDD and Readout Rate

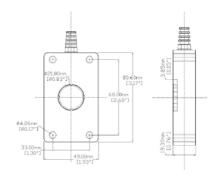
Magnets
Threaded - M8, 11/16 Hex
Shaft - 25.4mm

EMC Compliance
-EN61000-6-2 levels
-EN6000-6-4 Class A
-EN61000-4
-EN61000-2

Enclosure
Molded Macromelt IP67

Digital Com
EIA-RS485 with end bus
termination, bidirectional
half duplex @ 19200 baud

Pulse Output
Selectable between 20 &
50 ppr



² After maximum turns is reached the internal count rolls over to zero

³ Life determined for duty cycle of 12 hours ON and 12 Hours OFF