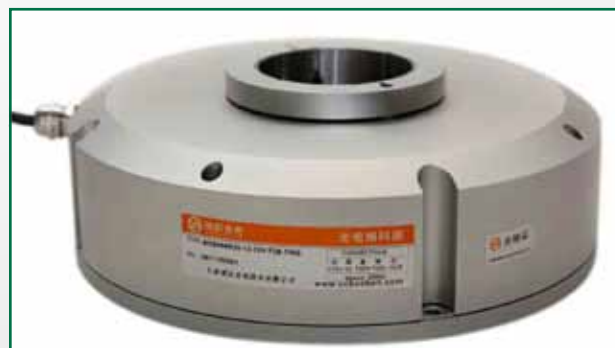


Absolute Encoder 绝对式编码器 Operation Manual 使用说明书



RAA206B60 · Series

长春荣德光学有限公司
CHANGCHUN RONGDE OPTICS CO.,LTD
www.roundssencoder.com

1.1 Appearance and Features

Appearance:

1. Shell Color: Silver.
2. Surface Treatment: Sandblast Oxidation.
3. Termination: Radial Output.
4. Cable Length: 1m (Can be customized).
5. Color of Cable: Black, Gray (Optional).

Features:

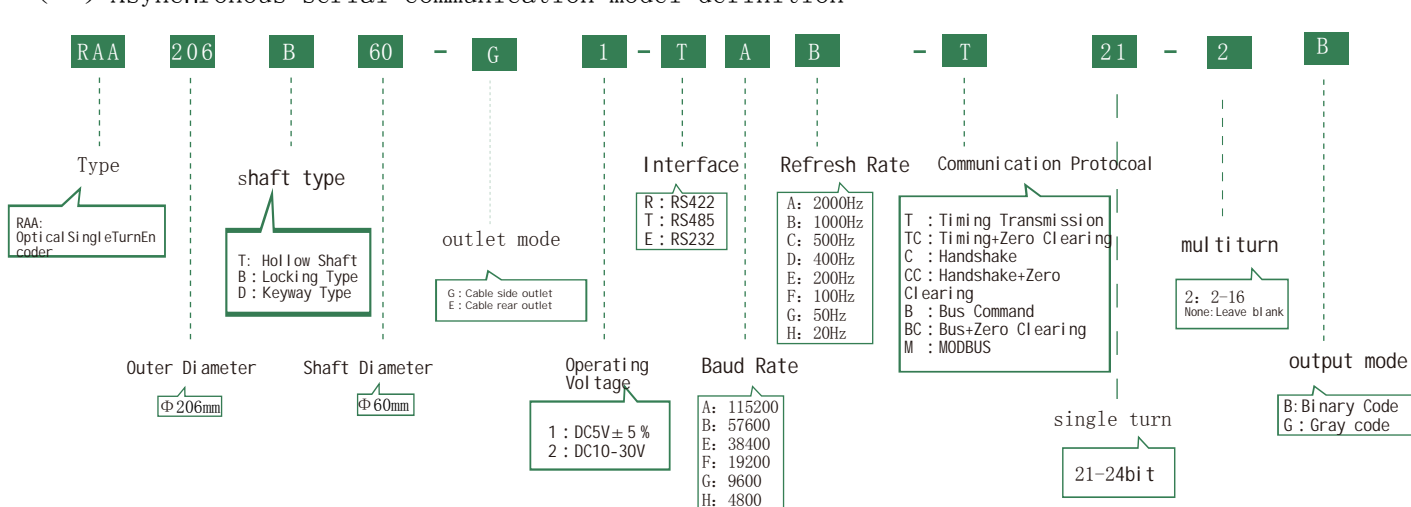
1. Large diameter hollow shaft products, military standards.
2. High precision and stability, to meet the needs of high-precision measurements.
3. Built in mounting bracket, durable, long life, anti-interference.



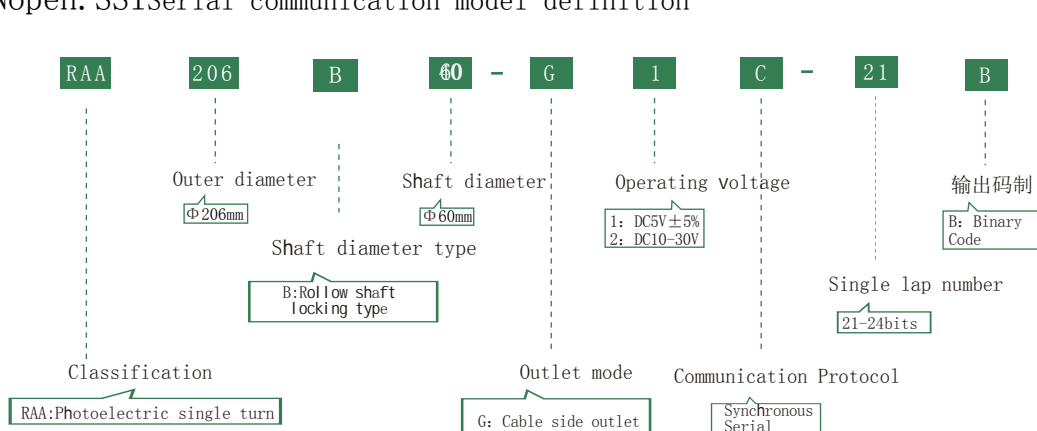
RAA206B60

1.2 Part Number Defined

(一) Asynchronous serial communication model definition



(二) CANopen, SSI Serial communication model definition



1.3 Notes

1. Please follow the instructions to use flexible connections for mounting to ensure the accuracy and service life of products.
2. Encoders are precise instruments adjusted strictly before leaving factory. Strong impact, dismantlement and changes on encoders are not allowed.
3. To guarantee the accuracy and work of encoder, when the operating voltage is DC5V ± 5%:
 - (1) Cable length should not exceed 2 meters.
 - (2) The current of the power supply should not be less than 0.5A.
 - (3) The interference signal of the power supply should be within ± 50mV.
- When operating voltage is 10-30V:
 - (1) The current of the power supply should not be less than 0.3A.
 - (2) The interference signal of the power supply should be within ± 50mV.
4. The corresponding supply voltage and connections to the equipment should be paid attention by the professional installation people.
5. Please read the instructions carefully before using the product.

2.1 Basic Specifications

Resolution in Bit	21~24bit	Measuring Range	0 ~ 360° (Single-turn)
Resolution in Bit		21 bit	22 bit
Angular Resolution		0.6"	0.3"
Accuracy ≤		±6"	±4"

2.2 Environment Specifications

Working Temperature	-40°C~+65°C	Protection Class	IP54
Storage Temperature	-50°C~+70°C		

2.3 Mechanical Specifications

Outer Diameter	206 mm	Shaft Diameter	60 mm
Height	60.5 mm	Max Speed	300 r/min
Weight	2990 g	Radial Shaft Load	≤40N
Vibration	2.5 g	Axial Shaft Load	≤20N
Shock	20 g		

2.4 Electrical Specifications

(1) Asynchronous Serial Communication

Supply Voltage	DC5V, 10~30V
Interface	RS485, RS422, RS232, CAN
Communication Protocol	MODBUS, CANopen, Timing Transmission, Timing Transmission+Zero Clearing, Handshake, Handshake+Zero Clearing, Bus Command, Bus+Zero Clearing
Baud Rate (b/s)	115200, 57600, 38400, 19200, 9600, 4800, 2400
Refresh Rate	2000Hz, 1000Hz, 500 Hz, 400 Hz, 200 Hz, 100 Hz, 50 Hz, 20 Hz
Output Code	Binary Code, Gray Code

(2) Synchronous Serial Communication

Supply Voltage	DC5V, 10~30V
Communication Protocol	SSI
Output Code	Binary Code, Gray Code

2.5 Installation Instruction

