



## **DIGITAL OPTICAL ROTARY ENCODER**

**(Model: LPD3806-100BM-G5-24C)**



## Wiring:

Green = A phase

White = B phase

Red = Vcc positive power supply

Black = Vo (Ground)

Another metal shielding layer interference.

## Output:

AB two-phase quadrature output rectangular pulse, the circuit output is NPN open collector output type

This type can be output with internal pull-up resistor available in Arduino, microcontrollers or PLC, such as Atmega, pic, 51 or microcontroller Mitsubishi PLC.

If Internal Pullup is not available, then you need to Pull-up Output Channel A & B with resistors supplied with product. i.e. resistor between Green and RED, White and RED wire.

## Technical Details:

Item		Diameter 38mm shaft 6mm type incremental rotary encoder
Resolution(P/R)		100
Output Phase		AB Phase
Output Type		NPN Open Collector
Electrical	Supply Voltage	5-24VDC
	Current consumption	Max. 40mA
	Response frequency	Max. 20Khz
	Allowable revolution	Max. 2000 rev/min
Mechanical	Starting torque	Max. 20gf.cm (0.002N.m)
	Rotor inertia	Max. 15g.cm <sup>2</sup> (1.5*10 <sup>-6</sup> kg.m <sup>2</sup> )
	Shaft loading	Radial: Max. 2kgf Thrust: Max. 1kgf
	Mechanical Speed	Max. 5000 rev/min(*1)
Environmental	Ambient temperature	-10~70 (at non-freezing status), Storage:-25~85
	Ambient humidity	35~85%RH, Storage: 35~90%RH
	Protection	IP50 (IEC standard)
	Vibration	1.5mm amplitude at frequency of 10-55 Hz in each of X,Y, Z direction for 2 hours.
	Shock	Max. 40G
Unit weight		Approx: 180g
Cable		1.5m (The cable length can be customized)
Approval		CE ROHS
(*1)		Mechanical speed > Allowable revolution, Please take allowable speed as standard when use