

ROTARY LINK UNIT®

Contactless signal & power transmission for 360° rotatable platforms

The Rotary Link Unit: The Contactless Way of Signal & Power Transmission

The Rotary Link Unit(RLU) is an optical electronic interconnect device for data and electrical power transmission, which we have developed to meet customers' requirements of high speed data transmission while allowing endless 360° rotation between a stationary and a rotating section.

Product advantages

◆ No contact transmission

By using optical transmission technology, sending and receiving of signals is done without any contacts. Furthermore the power supply to the rotary section is also contactless by using electro-magnetic induction.

◆ High-speed digital signal transmission

The RLU is able to transmit data with a speed up to 1.5Gbps which makes it a highly reliable device for huge data transmission or high definition image and video signals.

◆ Noise free signal transmission

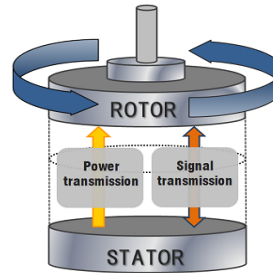
By using optical technology, the transmission process is immune against noise and other electromagnetic influences.

◆ Maintenance free

No sign of wear or degradation of the rotary link connector's performance due to the lack of physical connector parts, therefore there is no need to change parts during its lifetime.

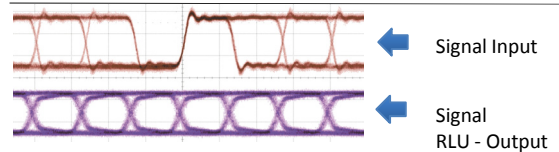
◆ Compatible with different interfaces

The RLU can work with different data interfaces such as RS-232, RS-422, Ethernet, HD-SDI, Gigabit Ethernet...etc.



Optical signal transmission & electrical power transmission between a stator and a rotor

Rotary Link Unit
Input/Output Waveform
Transfer speed at 1.5Gbps



Fields of applications

- ◆ Security / Surveillance Systems
- ◆ Radars & Sensors Systems
- ◆ Robotics
- ◆ Automation
- ◆ Other rotating and moving machineries



RLC-3-38-1.5G Specification



Item	Specification		figures	unit	notes
Low speed signal transmission	No. of channels	stationary part→rotating part	1	ch	LVTTL level
		rotating part→stationary part	1		
	Transfer rate	stationary part→rotating part	1M	bps	
		rotating part→stationary part	1M		
High speed signal transmission	No. of channels	rotating part→stationary part	1	ch	Differential signaling
	Transfer rate		1.5G	bps	
Electrical power	Input-Output voltage		12	V	Efficiency 85% TYP
	Output electrical power		10	W	
Shape	Dimensions (□×h)		□38×53	mm	
Physical characteristics	Operating temperature range		-40/+70	°C	
	Max. rotation speed		<100	rpm	



Nihon Maruko International Group
2-8-8 Shinyokohama Kouhoku-ku
Yokohama-Shi 222-0033 Japan

www.cnmaruco.co.jp/rotarylink.html
E-mail: m_koitabashi@cnmaruco.co.jp
Tel: +(81)568 79 6512