

NEW PRODUCT

OPTICAL DATA TRANSMISSION DEVICE

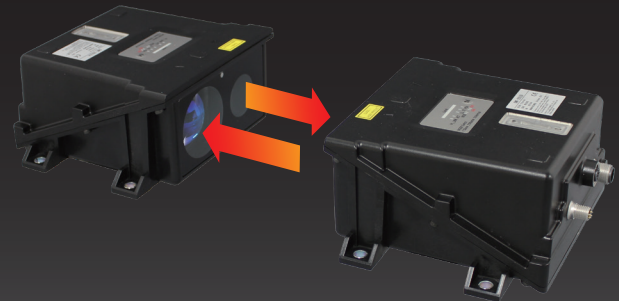
DWF-20LE

Features

- Non-contact optical repeater
- Ethernet interface available for Open Network like EtherCAT
- Can be directly connected to Ethernet
- 100Mbps speed, 200m range

Applications

- Stacker crane communication and control (Automated storage/retrieval systems (ASRS))

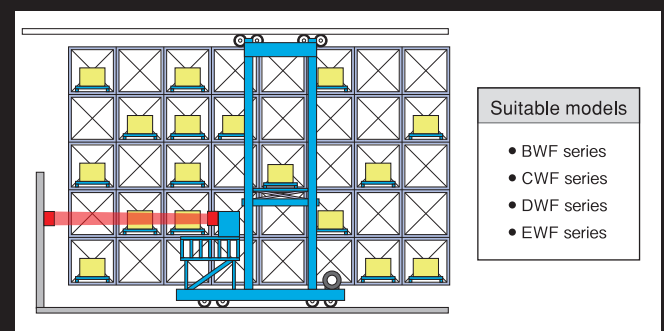
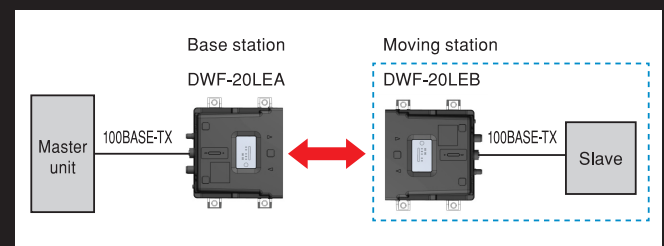


Specifications

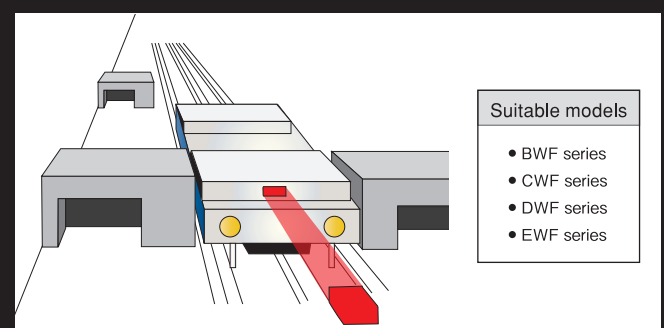
Part No.	DWF-20LEA	DWF-20LEB
Transmission distance	200m	
Directional angle	1° full angle	
Power source	DC24V(±10%)	
Consumption current	150mA (24VDC)	
Transmission method	Full-duplex two-way transmission	
Transmission speed	100Mbps	
Laser wavelength	658nm (Red)	830nm (Infrared)
Laser class	Class 1 (IEC60825-1 2014)	
Interface	Ethernet	
Communication standard	IEEE802.3u 100BASE-TX (Auto-negotiation)	
Modulated method	Direct modulation	
Connection	M12 connector (Ethernet communication), M12/4 pins, D-coding/Female	
	M12 connector (Power/Alarm), M12/5 pins, A-coding/Male	
Weight	800g	
Ambient temperature/ Humidity	-10 to 50°C / 85%RH or less (not frozen)	
Ambient illuminance	10000lux or less (Halogen / Mercury lamp)	
Impact resistance	490m/S ² , Each 10 times in X, Y and Z directions	
Vibration resistance	Double amplitude 1.5mm, 10 ~ 55Hz, each 2 hours in X, Y and Z directions	
Protective structure	IP65	
Light-reception level output (ARM)	Photo-coupler open-collector (Withstand voltage 36V) Light-ON (Max. 50mA, Residual voltage 1.5V)	
Level voltage output (Analog output)	Approx. 0.0V to 3.0V M8 connector, 4-pins, A-coding/Male Use only when adjusting the optical axis. No external wiring possible	

Note : A and B must work together as a pair.

System structure



- **Control of stacker crane for Automated Storage Systems**
Instruction of address, main power ON / OFF, traveling and upturn / downturn etc.



- **Control of track type AGVs**
Instruction of address, main power ON / OFF, traveling etc.