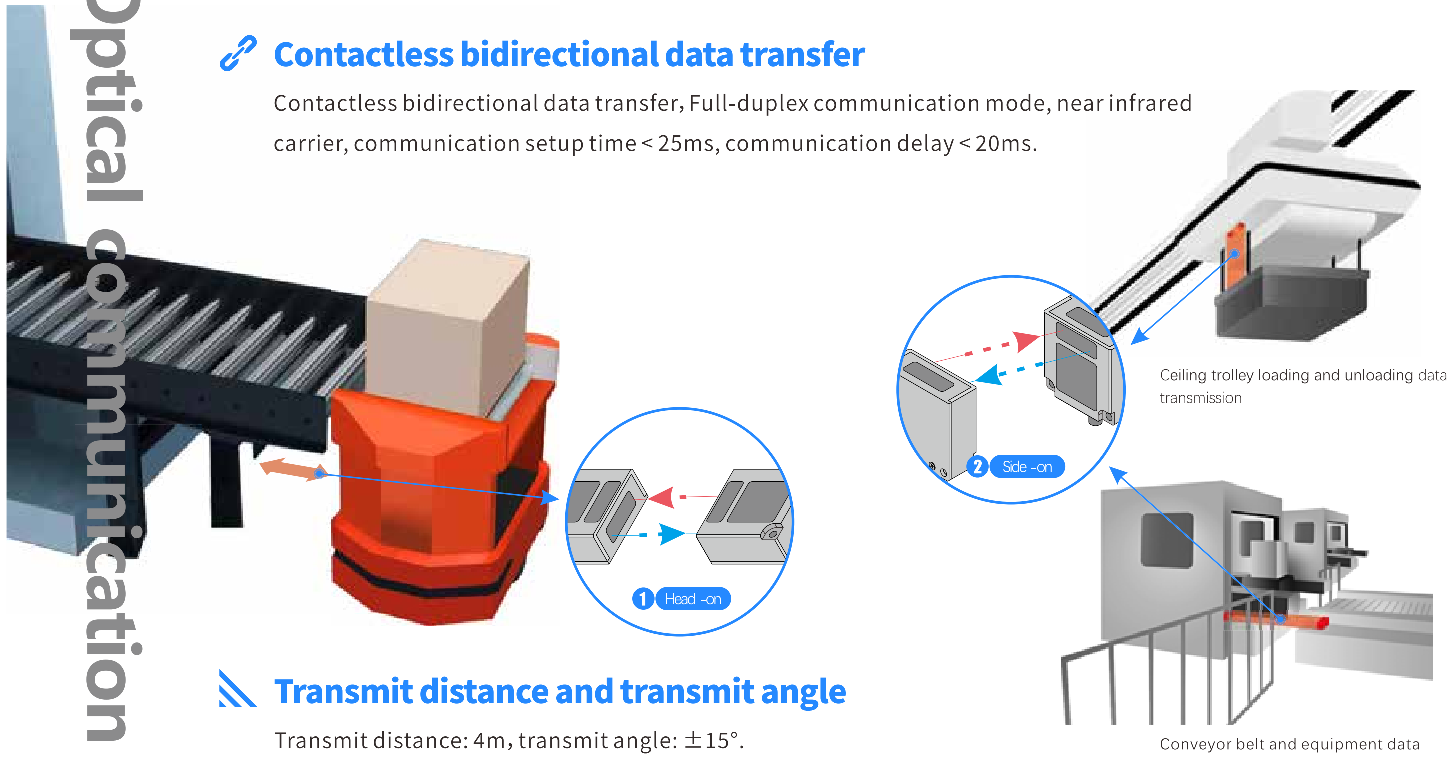
OPCA series (Optical Data Transmission Device)

Optical communication sensor

By using optical communication, fixed equipment (workbench/conveyor belt) can be wirelessly connected to mobile equipment (such as AGV trolley), and data can be transmitted without physical contact.
According to and issue processing instructions, guide equipment data transfer, reduce wear and loss caused by traditional mechanical contact, shorten transmission time, and optimize original data processing. The equipment has extremely high noise immunity and strong light interference resistance, which further ensures communication stability and improves operating efficiency.

Contactless bidirectional data transfer

Contactless bidirectional data transfer, Full-duplex communication mode, near infrared carrier, communication setup time < 25ms, communication delay < 20ms.

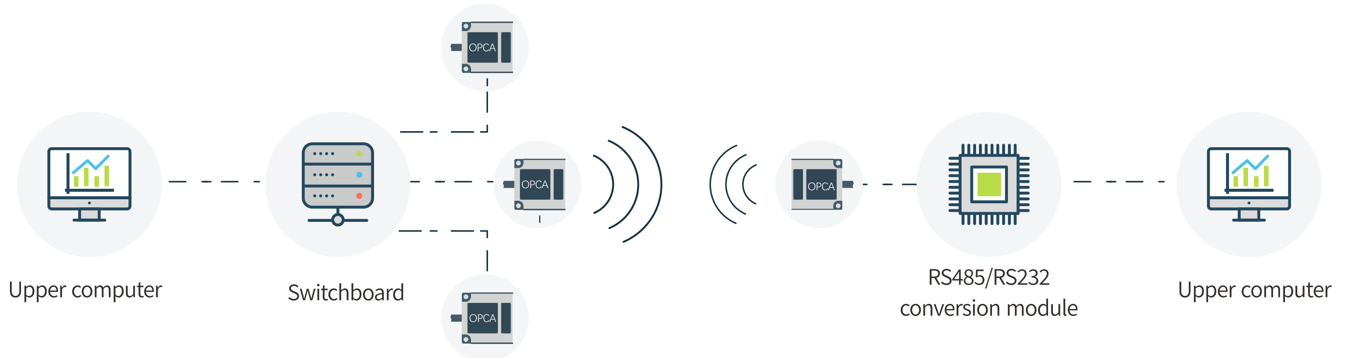


Transmit distance and transmit angle

Transmit distance: 4m, transmit angle: ±15°.

Support Ethernet networking, simpler connection and safer transmission

OPCA-ETF/ETS series supports Ethernet networking by setting different IP addresses, eliminating the need to add communication conversion modules on site, and supports optical communication docking with different types of communication methods (including switch, RS485 and RS232), A complete communication verification mechanism ensures data integrity, and the preset cache has the ability to disconnect and reconnect within a certain period of time without losing packets.



* The number of optical communication connected to the switch is related to the network port and IP allocation of the switch;
* Different types of optical communication docking, the transmission rate is based on the low-speed equipment.

Product Model	OPCA-CNF	OPCA-CNS	OPCA-N8F	OPCA-N8S	OPCA-P8F	OPCA-P8S	OPCA-ETF	OPCA-ETS
Features								
Transmission distance	0~4 m							
Transmit angle	±15°							
Communication build time	< 25ms							
Communication time-delay	< 20ms							
Communication speed	9600bps							
Transmit window	Head -on	Side -on	Head -on	Side -on	Head -on	Side -on	Head -on	Side -on
Interfaces								
RS232	●	●	–	–	–	–	–	–
RS485	●	●	–	–	–	–	–	–
SWITCH	–		8*NPN (Input)		8*PNP (Input)		–	
	–		8*NPN (Output)		8*PNP (Output)		–	
RJ45	–	–	–	–	–	–	TCP/IP(100m Server)	
Mechanics/electronics								
Voltage	DC 10~30V							
Rated current	< 25mA		< 50mA					
Wavelength	940nm							
Debug method	Pulse modulation							
LED	6*LED		18*LED				7*LED	
Material	ABS							
Protection level	IP54							
Ambient data								
Ambient light	< 4000Lux							
Working environment	Indoor -10~50°C <80% RH(No condensation, No frost)							

● Support – Not Supported