CWF-11/12   **OPTICAL DATA TRANSMISSION DEVICE**

Transmission distance 80m, Small size and Light weight
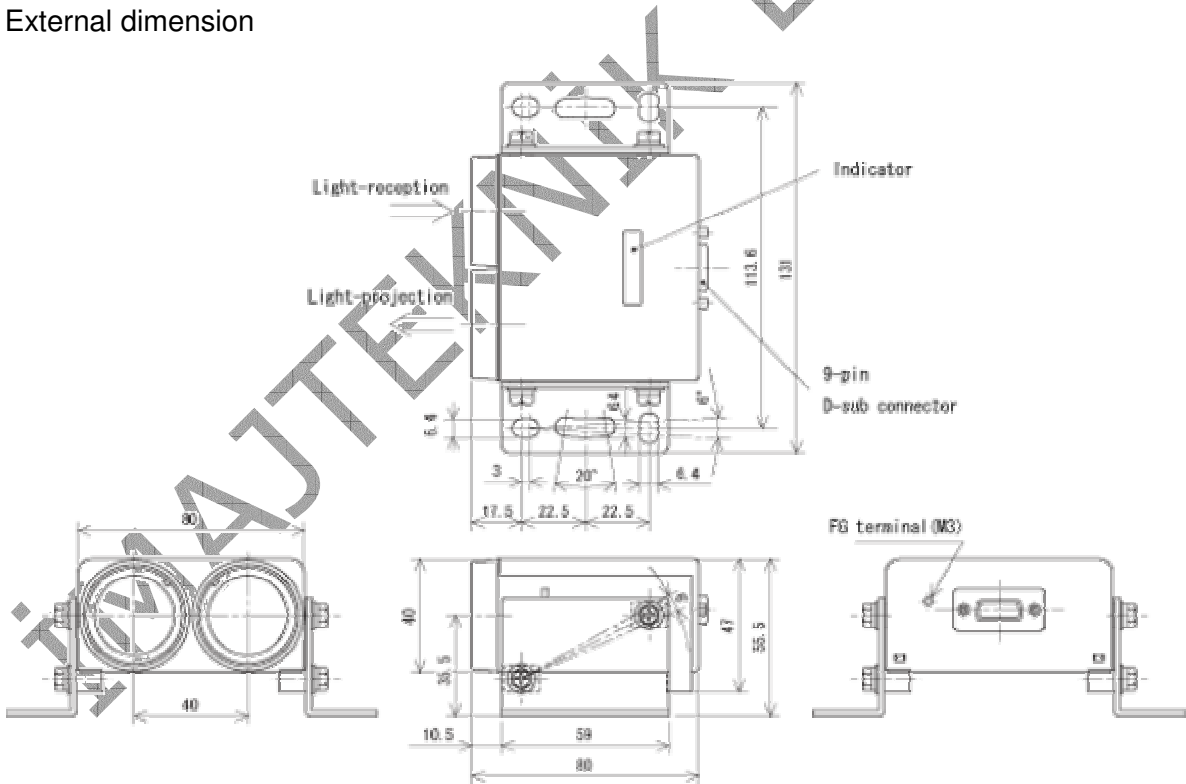
Feature

- This is an optical data transmission device. This is suitable for the application such as automatic warehouse, stacker crane or overhead crane. Transmission distance is up to 80m and it is easy to adjust optical axis.

Specifications

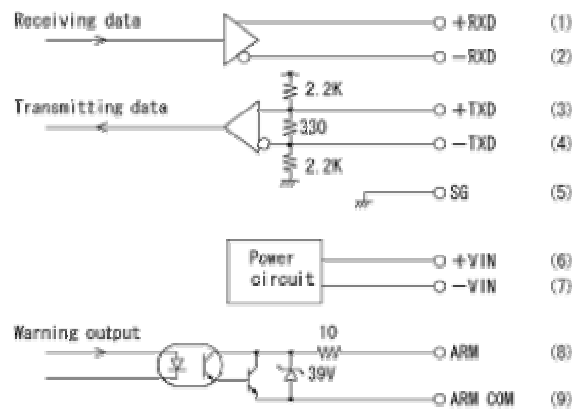| Model No.	CWF-11A	CWF-11B	CWF-12A	CWF-12E
Transmission distance	80m			
Directional angle	±2°			
Power source	12 to 24VDC(Allowable operating voltage 10 to 30VDC)			
Current consumption	160mA			
Transmission method	Full-duplex two-way transmission			
Transmission speed	DC to 19,200bps		DC to 9,600bps	
Interface	RS-422		RS-232C	
Modulation method	FSK modulation			

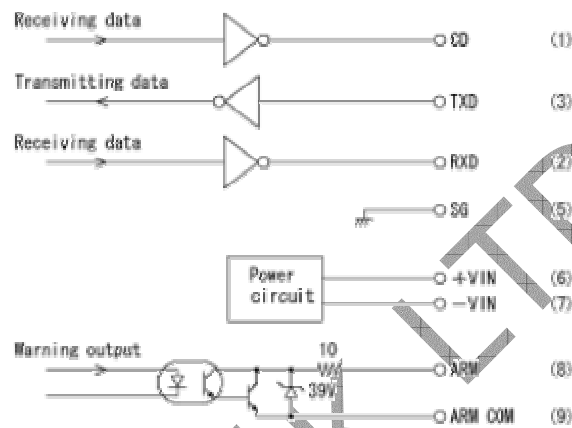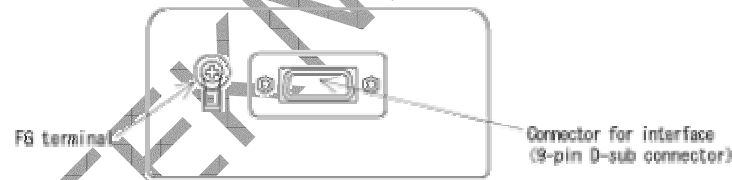| Modulated frequency	Transmission:5.5MHz Reception:6.0MHz	Transmission:6.0MHz Reception:5.5MHz	Transmission:5.5MHz Reception:6.0MHz	Transmission:6.0MHz Reception:5.5MHz
Connection	D-sub connector with 9-pin			
Ambient temperature/humidity	-10 to +50 degrees C, 85%RH or less(not icing)			
Ambient illuminance	20,000lux or less(Halogen/incandescent lamp)			
Impact resistance	$490m/s^2$, each 10 time in X, Y and Z directions			
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions			
Noise resistance	Impulse noise simulator, pulse width:1μ, 100ns, repeated cycle:100Hz, normal mode 1000V, common mode 500V			
Protective structure	IP60(IEC standard)			
Warning output(ARM)	ON when light-receiving level margin 1.5 times or more, Photo-coupler, open-collect 35V, 50mA			
Weight	Approx. 240g			

External dimension

Input/output circuit

CWF-11A/11B

Receiving data → +RXD (1)
−RXD (2)

Transmitting data ← 2.2K
330
2.2K
+TXD (3)
−TXD (4)
SG (5)

Power circuit → +VIN (6)
−VIN (7)

Warning output → 10
39V
ARM (8)
ARM COM (9)

CWF-12A/12B

Receiving data → CD (1)
Transmitting data ← TXD (3)
Receiving data → RXD (2)
SG (5)

Power circuit → +VIN (6)
−VIN (7)

Warning output → 10
39V
ARM (8)
ARM COM (9)

Connection

FG terminal

Connector for interface
(9-pin D-sub connector)

CWF-11A/11B

Interface	Pin No.	Symbols	Functions
RS-422	1	+RD	Reception data
	2	−RD	
	3	+SD	Transmission data
	4	−SD	
———	5	SG	Ground for signal
Power source	6	+VIN	DC power(12

Interface	Pin No.	Symbols	Functions
	7	–VIN(0V)	to 24VDC)
Warning	8	ARM	Warning output (ARM)
	9	ARM COM	

CWF-02A/02B

Interface	Pin No.	Symbols	Functions
RS-232C	1	CD	Reception data(Carrier detect)
	2	RD	Transmission data
	3	SD	Reception data
———	4	NC	Non-connection
	5	SG	Ground for signal
Power source	6	＋VIN	DC power(12 to 24VDC)
	7	–VIN(0V)	
Warning	8	ARM	Warning output (ARM)
	9	ARM COM	