

OPTICAL DATA TRANSMISSION DEVICE
 CWF-12A
 CWF-12B
 SPECIFICATIONS



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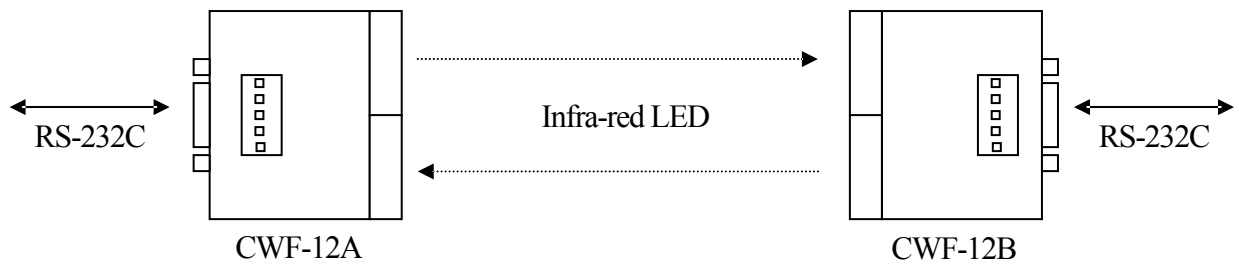
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Symbol	Amended reason			Pages	Date	Corrector	Amended No.
Approved by	Checked by	Drawn by	Designed by	Title	Optical Data Transmission Device CWF-12A/B Specifications		

1. General

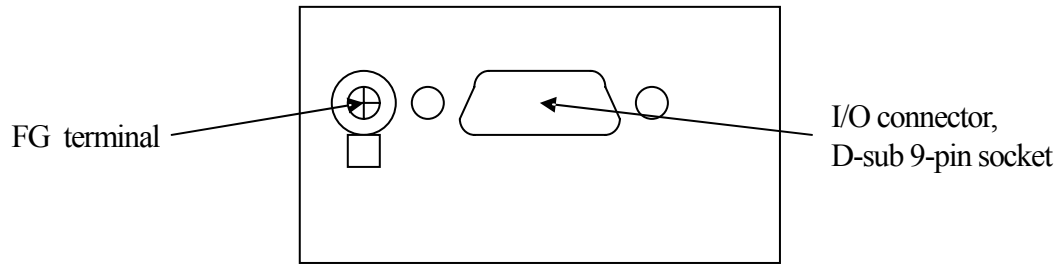
This device is serial type, optical data transmission device with 80m, transmission distance. This device provides A type and B type which can be used oppositely each other. Full-duplex transmission can be made.



2. Specifications

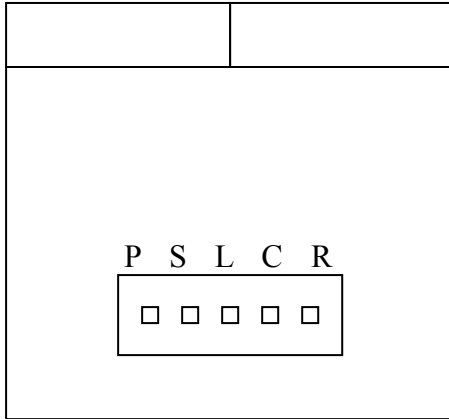
Model No.	CWF-12A	CWF-12B
Transmission distance	80m	
Directional angle	+/- 2 degrees	
Power source	12 to 24VDC(10 to 30VDC)	
Current consumption	160mA(12VDC) / 80mA(24VDC)	
Transmission system	Full-duplex two-way transmission device	
Transmission speed	DC to 9600BPS	
Interface	RS-232C	
Modulating system	FSK modulation	
Modulated frequency	Transmission : 5.5MHz Reception : 6.0MHz	Transmission : 6.0MHz Reception : 5.5MHz
Connection	D-sub connector 9-pin socket	
Ambient temperature/ Humidity	-10 to +50 degrees C 85%RH or les(Not icing)	
Ambient illuminance	20000lux 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 direction	
Protective structure	IP60	
Alarm output(ARM)	ON when light-reception level margin is 1.5 times or more Photo-coupler open-collector 35V 50mA	

3. Connection



Pin No.	Signals	I/O circuit
1	CD	 RS-232C output Carrier detect output
2	RXD	 RS-232C output
3	TXD	
4	NC	Non connection
5	SG	GND for signal
6	+ VIN	Power source 24VDC
7	- VIN	
8	ARM	 Alarm output
9	COM	

4. LED



- P : Power lamp
- S : Transmission data lamp
- L : Level lamp
Lights up when light-reception level margin is 1.5 times
- C : Carrier detection lamp
Lights up when light-reception level margin is 1 time
- R : Light-reception data lamp

5. Signal logic

Input		Output	
Signals	Level	Signals	Level
TXD	H	RXD	H
	L		L
Interrupted optical path		RXD	L

Optical path state	Signals	Level
Light-receiving	CD	H
Light-interrupting		L

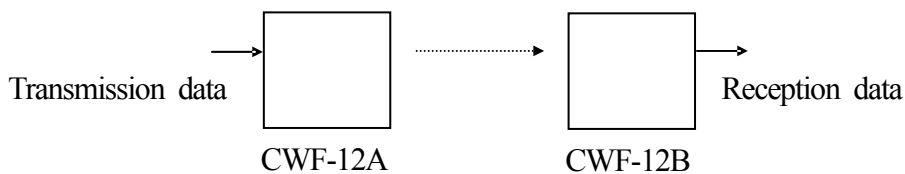
RS-232C output signal level

H : +5V to +8V

L : -5V to -8V

6. Transmission delay time

Measuring structure



Transmission delay time from transmission data to reception data : 50I s or less



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