

**SMALL SIZE, LIGHT WEIGHT & LONG DISTANCE(50m) TRANSMISSION!  
ACTUAL TRANSMISSION DISTANCE IS 2 TIMES OR MORE THAN RATED VALUE AND DATA TRANSMISSION WITH HIGH RELIABILITY IS REALIZED!**

\* CWF series is smaller size and lighter weight than BWF series

\* I/O signal with Max. 128 points can be transmitted with exclusive serial/parallel converter.(16 points per unit)



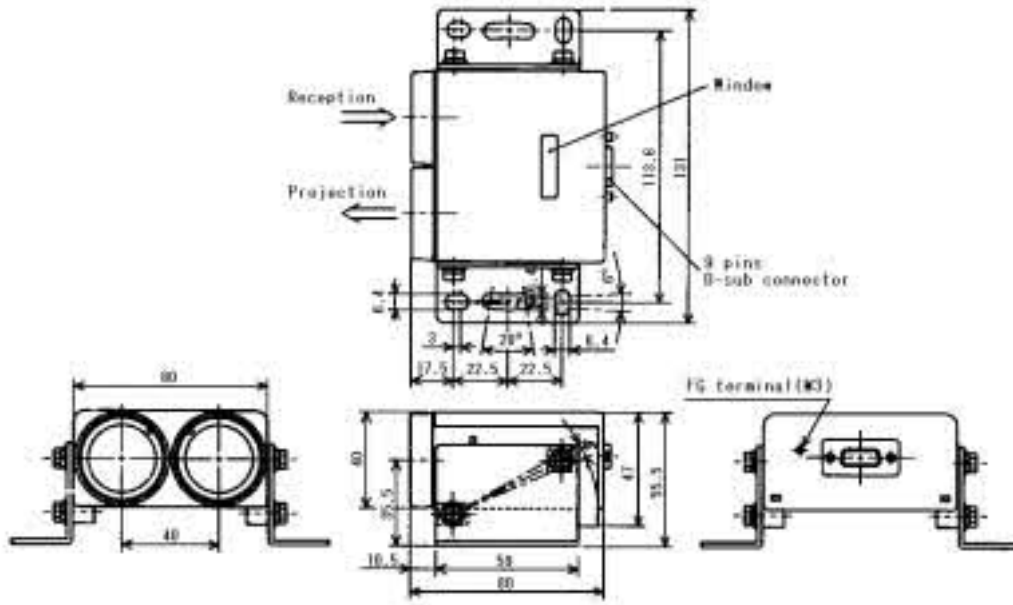
### Specifications

Model No.	CFW-01A	CFW-01B	CFW-02A	CFW-02B
Transmission distance	50m			
Directional angle	+/- 2 degrees			
Power source	24VDC(+/- 10%)			
Current consumption	160mA or less		80mA	
Transmission method	Full duplex two-way transmission			
Transmission speed	DC to 19.2Kbps			
Input/output interface	RS-422		RS-232C	
Modulation method	FSK modulation			
Modulated frequency	A type(Transmission 5.5MHz, reception 6.0MHz) B type(Transmission 6.0MHz, reception 5.5MHz)			
Connection	9 pins D-sub connector			
Ambient illuminance	20,000lux or less(Both halogen and incandescent lamp)			
Ambient temperature/humidity	-10 to +50 <sup>°</sup> , 85%RH or less(Not frozen)			
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions			
Impact resistance	490m/s <sup>2</sup> each 10 time in X, Y and Z directions			
Noise resistance	Impulse noise simulator Pulse width 1T sec, 100ns Repetition cycle 100Hz Normal mode 1,000V Common mode 500V			
Weight	Approx. 500g			
Alarm output(ARM)	ON when light-reception level margin is getting 1.5 times or more, Photo-coupler open-collector 35V, 50mA			
Protective structure	IP60(IEC standard), available up to IP64 as option			

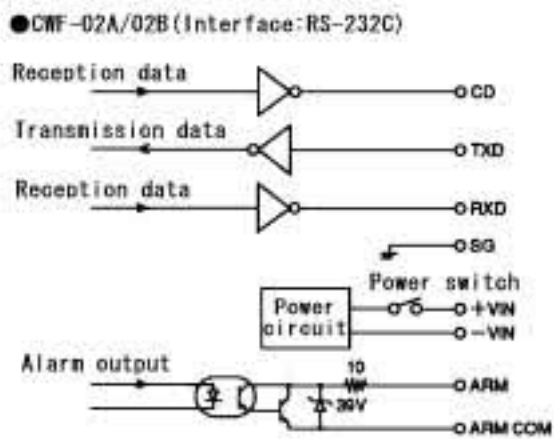
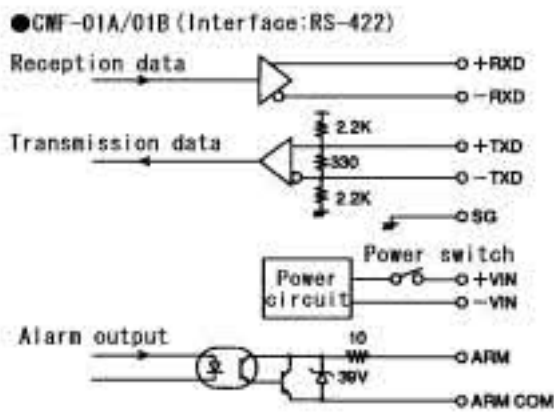
\* Multiple connection type with CS(Chip select) is available.(Max. 10 pcs)

\* 12VDC type is also available.

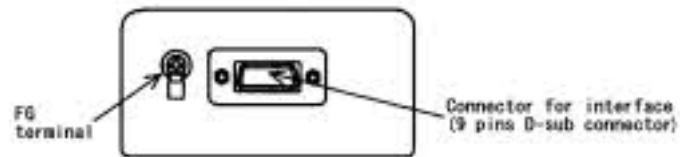
## External dimension



## Input/output circuit



## Connection



\* CWF-01A/B

Interface	Pin No.	Signals	Specifications
RS-422	1	+RXD	Reception data
	2	-RXD	
	3	+TXD	Transmission data
	4	-TXD	
-----	5	SG	Grand for signal
Power	6	+VIN	DC power(24VDC)
	7	-VIN(0V)	
Alarm	8	ARM	Alarm output
	9	ARM COM	

\* CWF-02A/B

Interface	Pin No.	Signals	Specifications
RS-232C	1	CD	Reception data (Carrier detect)
	2	TXD	Transmission data
	3	RXD	Reception data
-----	4	NC	Non connection
-----	5	SG	Grand for signal
Power	6	+VIN	DC power(24VDC)
	7	-VIN(0V)	
Alarm	8	ARM	Alarm output
	9	ARM COM	