



BWF[Serial type/long distance type]

OPTICAL DATA TRANSMISSION DEVICE



High performance in compact and light weight of handy size, 44 x 84 x 130.3mm!

Long distance, 100m and 200m!

400m type is also available in the same size!

Feature

- Actual transmission distance is 2 times or more than rated value and data transmission with high reliability is realized.
- Many kinds of interface are lined up, RS-232C, RS-422, current-loop and RS-422/RS-485 multi-drop, etc.
- Level lowering warning output is provided due to prevent some troubles such as dislocation of optical axis or dirty lens surface.
- It can be easy to check optical axis adjustment with optical checker or checking terminal.

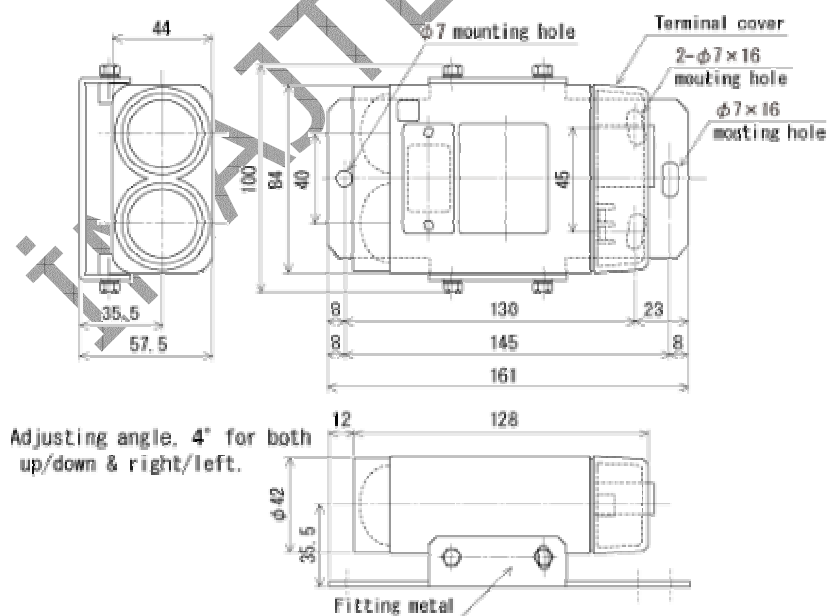
Specifications

| Model No. | BWF-11A/11B | BWF-21A/21B | BWF-31A/31B | BWF-41A/41B |
|-----------------------|--|-------------|--|-------------|
| Transmission distance | 100m | 200m | 100m | 200m |
| Directional angle | ±2° | ±1° | ±2° | ±1° |
| Transmission method | Full-duplex two-way transmission | | | |
| Transmission speed | DC to 19.2kbp | | | |
| Interface | RS-232C/RS-422 | | | |
| Modulation method | FSK modulation | | | |
| Modulated frequency | A type(Transmission:5.5Hz, reception:6.0Hz), B type(Transmission:6.0Hz, reception:5.5Hz) | | | |
| Power source | 12 to 24VDC(Allowable operating voltage 10 to 30VDC) | | 12 to 24VDC(Allowable operating voltage 10 to 30VDC) | |

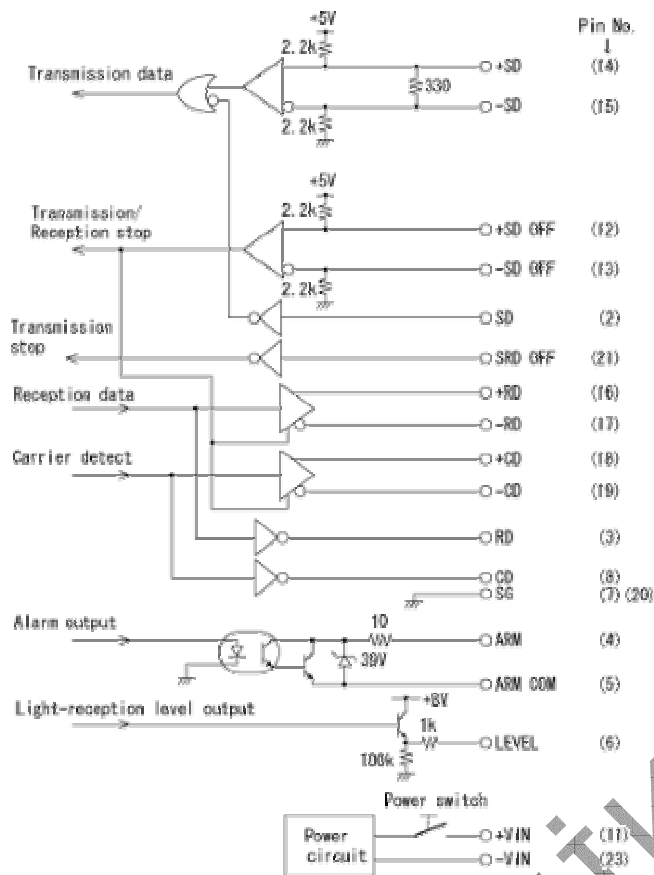
| | | |
|-------------------------------------|---|------|
| Current consumption | 150mA or less(when 12VDC), 80mA or less(when 24VDC) | 40mA |
| Indications lamps | Power source, carrier detect, data input, data output, light-reception level margin(Red LED) POW(Power lamp): Light-up when power source ON CD(Carrier detect lamp): Light-up when light-reception, light-reception margin level 1 SD(Data input lamp): Light-up when transmission data input RD(Data output lamp): Light-up when reception data output L1(Light-reception level lamp): Light-up when margin 1.5 times L2(Light-reception level lamp): Light-up when margin 2 times L3(Light-reception level lamp): Light-up when margin 2.5 times | |
| Warning output (ARM) | ON when light-receiving level margin 1.5 times or more and OFF when it is 1.5 times or less, Photo-coupler(35V, 50mA) | |
| Light-reception level output | 0 to 5V(in proportion to light-reception amount) | |
| Connection | Connector type(D-sub connector with 25-pin), M3 screw terminal for power source | |
| Ambient illuminance | 20,000lux or less(sunlight/incandescent lamp) | |
| Ambient temperature/humidity | -10 to +50 degrees C, 85%RH or less(not icing) | |
| Protective structure | IP60(IEC standard), IP64 is available if option parts are used | |

Note) Ask us about current-loop and multi-drop interface.

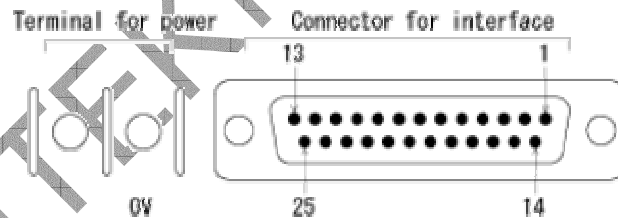
External dimension



Input/output circuit



Connection



Power terminal(M3 screw terminal) Make sure to connect +V to terminal at left side for DC power. DC power provides on connector for interface too. Connect either one.

Connector for interface

| Interface | Pin No. | Symbols | Functions |
|-----------|---------|---------|--------------------------|
| RS-232C | 2 | SD | Transmission data |
| | 3 | RD | Reception data |
| | 8 | CD | Reception carrier detect |
| | 21 | SD OFF | Transmission stop |
| RS-422 | 14 | +SD | Transmission data(+) |
| | 15 | -SD | Transmission data(-) |

| | | | |
|---------------------|--------|-------------|--------------------------------|
| | 16 | +RD | Reception data(+) |
| | 17 | -RD | Reception data(-) |
| | 18 | +CD | Reception carrier detect(+) |
| | 19 | -CD | Reception carrier detect(-) |
| | 12 | +SRD OFF | Transmission/reception stop(+) |
| | 13 | -SRD OFF | Transmission/reception stop(-) |
| Level | 6 | LEVEL | Light-reception level output |
| | 7 · 20 | SG(OV) | Ground for signal |
| Warning | 4 | ARM | Warning output (ARM) |
| | 5 | ARM COM(OV) | |
| Power source | 11 | +VIN | DC Power (voltage 10 to 30VDC) |
| | 23 | -VIN(OV) | |

Note) Don't connect 0V for power source to ground for signal(SG).



adresimiz
deđiřti

Tel:212/2359535
Fax:212/2359537

Emekyemez Mah.Yüksek Minare Sk. No:8 / 17
80020 Karaköy / İstanbul

İMAJTEİ