Fiber Optic Amplifier Communication Converters

BFC Series
CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.
The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

• Sets all Functional performance and parameters from external devices (PC, PLC)

• Supports various communications
  : RS485 communication, Serial Communication, SW input

• Connected up to 32 amplifiers (BF5 series)

• Slim design with depth 10 mm (W 10 × H 30 × L 70 mm)

Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

BFC	-	❶

❶ **Input method**
N: NPN solid-state input
P: PNP solid-state input

Product Components

• Product
• Connector cable
• Instruction manual
• Side connector

Software

Download the installation file and the manuals from the Autonics website.

■ **DAQMaster**
It is the comprehensive device management program for Autonics' products, providing parameter setting, monitoring and data management.

Specifications

Model	BFC-□
Supported amplifier	BF5 Series
Comm. function	RS485, Serial communication, Switch (SW) input
Switch (SW) input	HIGH: 5-24 VDC⎓, LOW: 0-1 VDC⎓
Function	Real-time monitoring (incident light level, output state), Executes all functions and sets the parameters of BF5 Series via external devices (PC, PLC)
Indicator	TX indicator (red), RX indicator (green), display screen (PV display part: red LED, SV display part: green LED)
Approval	CE EAC
Unit weight	≈ 15 g

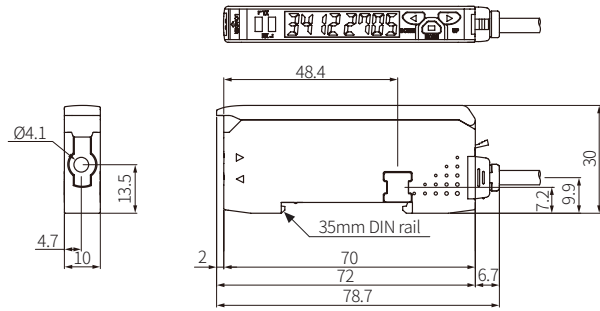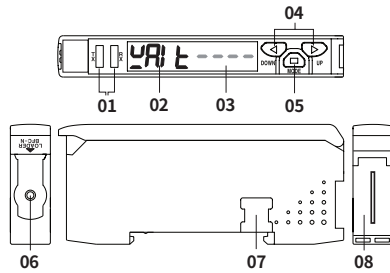| Power supply	12-24 VDC⎓ ±10% (using the power supply of the connected amplifier)
Current consumption	≤ 40 mA
Control output	NPN solid-state input / PNP solid-state input model
Vibration	1 mm double amplitude at frequency 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
Shock	500 m/s^2 (≈ 50 G) in each X, Y, Z direction for 3 times
Ambient temperature	-10 to 50 °C, storage: -20 to 60 °C (no freezing or condensation)
Ambient humidity	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)
Protection rating	IP40 (IEC standard)
Connection	Connector cable
Cable spec.	Ø 4 mm, 4-wire, 2 m
Wire spec.	AWG22 (0.08 mm, 60-core), insulator outer diameter: Ø 1.25 mm
Material	Case: PBT, cover: PC

Communication Interface

■ **RS485**

Comm. protocol	Modbus RTU
Application standard	Compliance with EIA RS485
Max. connection	31-unit (communication address setting: 01 to 99)
Comm. synchronous method	Asynchronous
Comm. method	2-wire half duplex
Comm. distance	≤ 800 m
Comm. speed	1,200 / 2,400 / 4,800 / 9,600 / 19,200 / 38,400 bps
Comm. response time	20 to 90 ms
Start bit	1-bit
Data bit	8-bit
Parity bit	None, Even, Odd
Stop bit	1-bit, 2-bit

Dimensions

• Unit: mm, For the detailed drawings, follow the Autonics website.

48.4

Ø4.1

13.5

4.7

10

2

70

72

6.7

78.7

30

7.2

9.9

35mm DIN rail

Unit Descriptions

01 02 03 04 05

06 07 08

01. **TX (transmission) indicator (red)**
RX (reception) indicator (green)

02. **PV display part (red 4-digit LED)**
It shows the parameter.

03. **SV display part (green 4-digit LED)**
It shows the parameter value.

04. **[◀] [▶] key**
Selecting the setting value.

05. **[MODE] key**
Enter mode, move parameter

06. **Serial communication port**
Connection port for the USB/Serial converter (SCM-US, sold separately)

07. **Side cover**
Remove when connecting with the amplifiers

08. **Connector cable terminal**
Terminal for the RS485 communication / switch (SW) input mode

Sold Separately

• Fiber optic amplifier: BF5 series
• Communication converter: SCM series