

# 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 - ①**

#### ① 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

<b>Model</b>	BFC-□
<b>Supported amplifier</b>	BF5 Series
<b>Comm. function</b>	RS485, Serial communication, Switch (SW) input
<b>Switch (SW) input</b>	HIGH: 5-24 VDC≐, LOW: 0-1 VDC≐
<b>Function</b>	Real-time monitoring (incident light level, output state), Executes all functions and sets the parameters of BF5 Series via external devices (PC, PLC)
<b>Indicator</b>	TX indicator (red), RX indicator (green), display screen (PV display part: red LED, SV display part: green LED)
<b>Approval</b>	CE EAC
<b>Unit weight</b>	≈ 15 g
<b>Power supply</b>	12-24 VDC≐ ±10% (using the power supply of the connected amplifier)
<b>Current consumption</b>	≤ 40 mA
<b>Control output</b>	NPN solid-state input / PNP solid-state input model
<b>Vibration</b>	1 mm double amplitude at frequency 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
<b>Shock</b>	500 m/s <sup>2</sup> (≈ 50 G) in each X, Y, Z direction for 3 times
<b>Ambient temperature</b>	-10 to 50 °C, storage: -20 to 60 °C (no freezing or condensation)
<b>Ambient humidity</b>	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)
<b>Protection rating</b>	IP40 (IEC standard)
<b>Connection</b>	Connector cable
<b>Cable spec.</b>	∅4 mm, 4-wire, 2 m
<b>Wire spec.</b>	AWG22 (0.08 mm, 60-core), insulator outer diameter: ∅1.25 mm
<b>Material</b>	Case: PBT, cover: PC

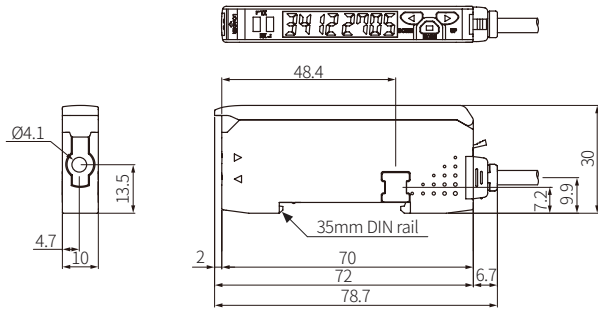
### Communication Interface

#### ■ RS485

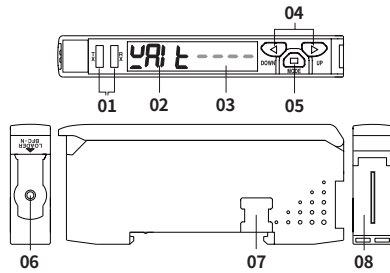
<b>Comm. protocol</b>	Modbus RTU
<b>Application standard</b>	Compliance with EIA RS485
<b>Max. connection</b>	31-unit (communication address setting: 01 to 99)
<b>Comm. synchronous method</b>	Asynchronous
<b>Comm. method</b>	2-wire half duplex
<b>Comm. distance</b>	≤ 800 m
<b>Comm. speed</b>	1,200 /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

## Dimensions

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



## Unit Descriptions



- 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