

New product launching information

Digital fiber optic amplifier Communication converters - BFC Series

Model	BFC Series
Launching Date	Available Now
Product Overview	<div data-bbox="304 734 887 1144"> </div> <div data-bbox="895 734 1477 1144"> </div> <p>BFC Series realizes all parameter setting and function control of BF5 Series</p> <p>- Autonics fiber optic amplifiers - using PC or PLC</p> <p>Digital fiber optic sensor communication converter unit - BFC Series is to perform all functions of BF5 Series including parameters setting and data monitoring easily using external devices (PC, PLC). Not only supporting various communication functions including RS485, serial communication and SW input mode, the series also can be connected with 32 amplifier units (BF5 Series) at a time. 10mm thickness slim design is another feature of the series in addition to its high performance.</p> <p>Autonics is launching Digital fiber optic amplifier Communication converters - BFC Series</p>
Approval	CE
Major Features	<p>çÃ Features</p> <p>* Sets all Functional performance and parameters from external devices (PC, PLC)</p>

* Supports various communications

: RS485 communication, Serial Communication, SW input

* Connect up to 32 amplifier units (BF5 Series)

* Slim design with depth 10mm(W10;H30;L70mm)

☞ User manual

* Visit our web site (www.autonics.com) to download communication manual.

* User manual describes for specifications and function, and communication manual describes for RS485 communication (Modbus RTU protocol) and parameter address map data.

☞ Integrated device management program(DAQMaster)

* DAQMaster is an integrated device management program for Autonics BFC Series providing GUI control for easy and convenient management of parameters and multiple device data monitoring.

* Visit our web site (www.autonics.com) to download user manual and integrated device management program.

< Computer specification for using software >

Item	Recommended specification
Processor	IBM PC compatible computer with Intel Pentium III or above
Operating system	Windows 98 / NT / XP / Vista / 7
RAM	Over 256MB
Hard disk	Over 1GB of available space
VGA	Over 1024×768
Others	RS232 serial port, USB port

< DAQMaster screen >



**Ordering
Information**

■ Specifications

Type	NPN Solid-state input	PNP Solid-state input
Model	BFC-N	BFC-P
Power supply	(*1) 12–24VDC ±10%	
Current consumption	Max. 40mA	
SW input (SW1, SW2)	LOW: 0–1V, HIGH: 5–24V	
	SW1/SW2 – HH: Standby, HL: BANK0, LH: BANK1, LL: BANK2	SW1/SW2 – LL: Standby, LH: BANK0, HL: BANK1, HH: BANK2
Communication function	RS485 Communication, Serial Communication, SW input	
Communication speed	1200, 2400, 4800, 9600, 19200, 38400bps	
Indication	<ul style="list-style-type: none"> • Parameter: Red 4digit 7segment • Setting value: Green 4 digit 7 segment • Indicator: TX indicator (Red), RX indicator (Green) 	
Function	<ul style="list-style-type: none"> • Real-time monitoring (incident light level, on/off state) • Executes every BF5 feature and sets parameter by external device (Master) 	
Environment	Ambient temperature	–10 to 50°C, Storage: –20 to 60°C
	Ambient humidity	35 to 85%RH, Storage: 35 to 85%RH
Vibration	1.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 2 hours	
Shock	500m/s ² (50G) X, Y, Z directions for 3 times	
Protection	IP40(IEC standards)	
Material	PBT, PC	
Accessory	Connector cable(φ4, 4P, 2m, AWG 22, Insulator diameter: φ1.25), side connector	
Approval	CE	
Unit weight	Approx. 15g	

Spec. Table

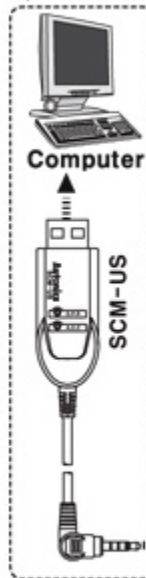
*1: Powered by supply voltage of the amplifier unit connected by a side connector.

* Environment resistance is rated at no freezing or condensation.

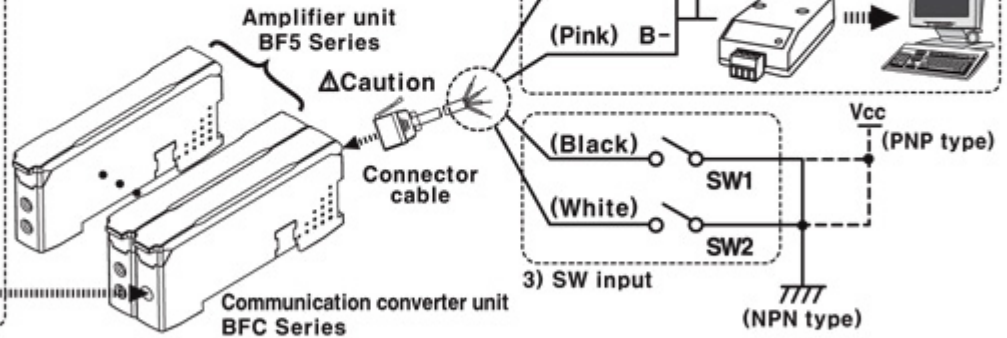
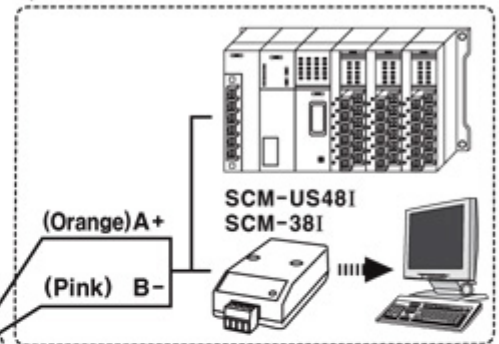
■ Communication mode

This communication converter unit supports 2 communication modes and SW input mode. You can use only 1 mode of 3 modes.

1) Serial communication



2) RS485



⚠Caution: Do not connect a powered BF5 connector cable to a communication converter unit(BFC). (It may cause damage the product.)

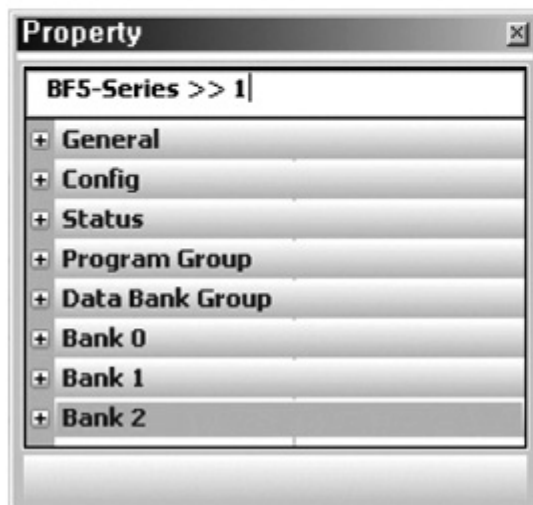
1) Serial communication

- ① Connect the USB to Serial converter(SCM-US, sold separately) to the PC loader port for communicating with PC.
- ② It is very easy to manage parameters and monitor data of connected amplifier units(BF5 Series) using the integrated management program DAQMaster(free). (Refer to DAQMaster and amplifier unit manuals)

2) RS485 communication

- PLC connection
 - ① Connect directly to a PLC using RS485 communication cable of the communication converter unit.
 - ② Amplifier units(BF5 Series) can be controlled through PLC. (Refer to communication converter unit(BFC) communication manual)
- PC connection
 - ① Connect PC using Communication converter(SCM-38I or SCM-US48I, sold separately). (Refer to Communication converter SCM series manual)
 - ② Same as "1)Serial Communication information line ②".

※Following is a screen of DAQMaster properties window of a computer connected communication converter unit.



	<p>3)SW input</p> <p>SW input is a feature which allows amplifier unit connected with the communication converter unit to load all banks. Applying signals to SW1(Black) and SW2(White) of the connector cables which is connected to the communication converter unit allows change of banks as shown in chart 1.(SW input signal duration should be longer than 3 seconds.)</p> <p style="text-align: right;">[Chart1] Bank selection table based on SW input</p> <table border="1" style="float: right;"> <thead> <tr> <th rowspan="2"></th> <th rowspan="2">Bank</th> <th colspan="2">NPN</th> <th colspan="2">PNP</th> </tr> <tr> <th>SW1</th> <th>SW2</th> <th>SW1</th> <th>SW2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Standby signal(Using set Bank)</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> <tr> <td>2</td> <td>Bank 0</td> <td>H</td> <td>L</td> <td>L</td> <td>H</td> </tr> <tr> <td>3</td> <td>Bank 1</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> </tr> <tr> <td>4</td> <td>Bank 2</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>		Bank	NPN		PNP		SW1	SW2	SW1	SW2	1	Standby signal(Using set Bank)	H	H	L	L	2	Bank 0	H	L	L	H	3	Bank 1	L	H	H	L	4	Bank 2	L	L	H	H
	Bank			NPN		PNP																													
		SW1	SW2	SW1	SW2																														
1	Standby signal(Using set Bank)	H	H	L	L																														
2	Bank 0	H	L	L	H																														
3	Bank 1	L	H	H	L																														
4	Bank 2	L	L	H	H																														
<p>Operation Manual</p>	<p>Click here to view / download the manual</p>																																		
<p>Applications</p>																																			
<p>Literatures to be provided</p>	<p><input checked="" type="checkbox"/> Leaflet <input type="checkbox"/> Catalog <input checked="" type="checkbox"/> Poster <input type="checkbox"/> Brochure</p>																																		
<p>Other Promotion Materials</p>	<p>None</p>																																		
<p>Sales Promotion Events</p>	<p>None</p>																																		
<p>Remarks</p>	<p>None</p>																																		

For more information, please contact overseas sales dept. at indonesia@autonics.com