

4 Channel Binary Transducer, 4 binary input ,4 high power MSR Relay output, fiber transmission

- » 4 Binary Input
- » 4 MSR High Power Relay Output, Maximum Breaking Capacity 2000VAC Load
- » M/M 2km, S/M 30km, or BiDi 20km Single Fiber for Transmit
- » EN61000-6-2, EN61000-6-4, CE and FCC Certified



The IFC-FDC converter is capable of selecting interface mode for connection to RS-232 (3 wire), RS-485 (2 wire, half duplex) or RS-422/485 (4 wire, full duplex) and features a three-way communication plus a second independent RS-232 communication channel. Additionally, the terminal block offers an alarm relay contact and two redundant DC power inputs. IFC-FDC is also available in two operating temperature ranges, a standard -10° to 60°C commercial temperature range and an extended -40° to 75°C range. With all these specifically designed features, IFC-FDC is a reliable and ideal solutions for keeping your industrial automation applications running smoothly and continuously even in harsh environments. The product is protocol transparent that can be applied to RS485/422/232 networks, such as MODBUS to achieve reliable network.

Features

- 4 isolated binary input (BI-1, BI-2, BI-3, BI-4)
- Selectable binary input threshold level by DIP Switch (18V or 70V)
- Maximum 2.5ma input current for binary input channel
- 4 MSR contact relay output (K1, K2, K3, K4), maximum breaking capacity 2000VA for AC load , 50~280W for DC resistive load, or 30W for DC inductive load
- Supports multi mode fiber 2KM or single mode 30KM fiber for transmit distances
- Supports duplex fiber, or single fiber BiDi to save cabling
- AC or DC wide range power input (60~300VDC or 60~264VAC)
- Removable terminal block connector for Power input, Alarm, Binary input and MSR Relay output
- CE, FCC, heavy industrial grade EMS, EMI, EN61000-6-2, EN61000-6-4 certified
- Supports relay output for power or failure warning
- Hardened housing with IP40 protection
- Fanless and DIN-Rail design for harsh industrial environment

Specifications

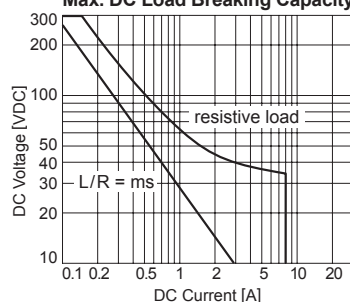
Binary Input

4x channel Binary Input (BI-1, BI-2, BI-3, BI-4)
Binary input threshold level select by DIP Switch, 18V or 70V threshold
Maximum input current 2.5ma per channel

Contact Relay Output

Channel: 4xMSR contact relay (K1, K2, K3, K4)
Contact rated voltage: 250VAC
Contact maximum switching voltage: 400VAC
Contact rated current: 8A
AC breaking capacity: Max 2000VA
DC resistive load breaking capacity: max. 50~280W (see below diagram for detail)
DC inductive load breaking capacity: max. 30W @L/R=50ms (see below diagram for detail)
MSR Relay responds time: 10/5ms max. (Operate/Release)

Max. DC Load Breaking Capacity



4 channel Binary Transducer

Fiber Transmission	Connector type: ST/SC, M/M, S/M or Bidi Optional distance: 2KM (M/M) 30KM (S/M), 20KM (Bidi) Fiber cable M/M : Dual fiber 50/125um, 62.5/125um S/M: Dual fiber 9/125um, 10/125um Bidi: Single fiber cable 9/125um, 10/125um	
Removable Terminal Block Connector	Support for Binary input, MSR Relay output, Power input and Alarm	
DIP Switch	SW1: BI-1, BI-2 threshold SW2: BI-3, BI-4 threshold SW3: Debounce SW4: Loopback test	
Environmental	Operating Temperature	-40 ~ 75°C
	Storage Temperature	-40 ~ 85°C
	Humidity	5 ~ 95% RH
LED Indications	PWR (Green): Power on SYS (Green): Normal operation LNK (Green): Fiber link Test / Alarm: ON: Link down, system loss or Power Error, Flash: Local loopback test, OFF: Normal operation BI-1~BI-4 (Green): Active K-1~K-4 (Green) : Active	
Alarm Relay	Alarm exists for power, fiber link, Relay output with carry capacity 1A @ 24VDC	
Power	Power Input	AC or DC wide range input power 60~300VDC or 60~264VAC input range
	Power Consumption	3.6W
	Power Reversal Protection	Supported for power input
	Removable terminal block connector for power input	
Mechanical	Water & Dust Proof	IP40 Protection, Fanless
	Dimensions	106 x 62.5 x 135mm (Dx Wx H)
	Mounting	DIN-Rail or wall mounting (Optional)
	Weight	815g
Certification		
EMC	CE (EN55032, EN55035)	
EMI	FCC Part 15 Subpart B Class A, CE	
Immunity for Heavy Industrial Environment	EN61000-6-2	
Emission for Heavy Industrial Environment	EN61000-6-4	
EMS (Electromagnetic Susceptibility) Protection Level	EN61000-4-2 ESD Level 3	
	EN61000-4-3 RS Level 3	
	EN61000-4-4 EFT Level 3	
	EN61000-4-5 Surge Level 3	
	EN61000-4-6 CS Level 3	
Free Fall	IEC 60068-2-31	
Vibration	IEC 60068-2-6	
Shock	IEC 60068-2-27	
Green	RoHS	
MTBF	165,680 Hours (MIL-HDBK-217)	
Warranty	5 years	

Application & Topology

Figure 1 : Application connection diagram

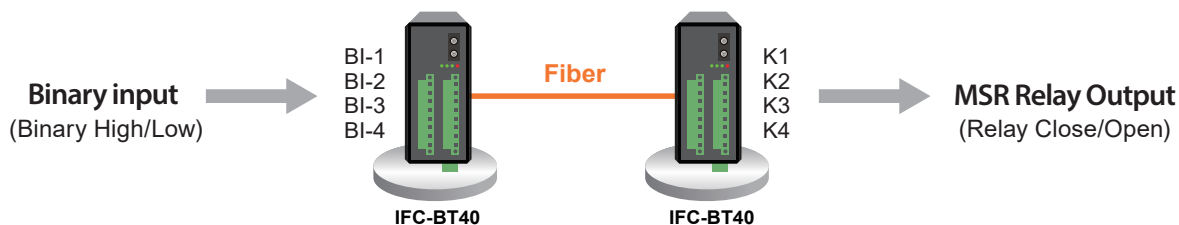
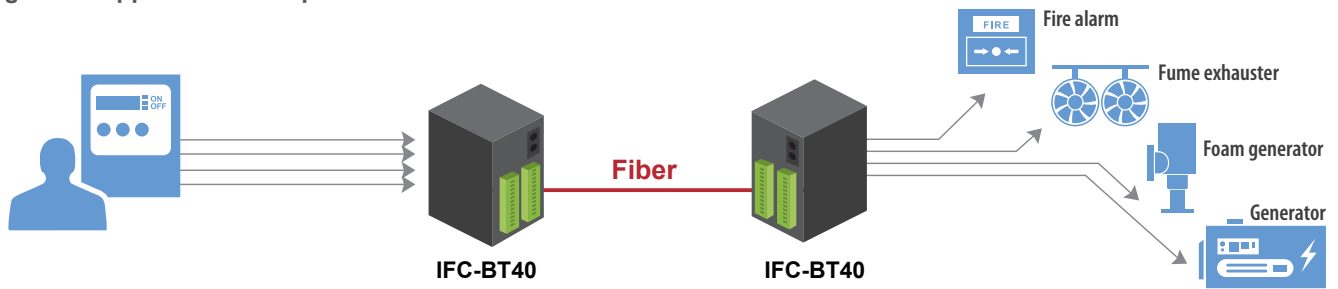
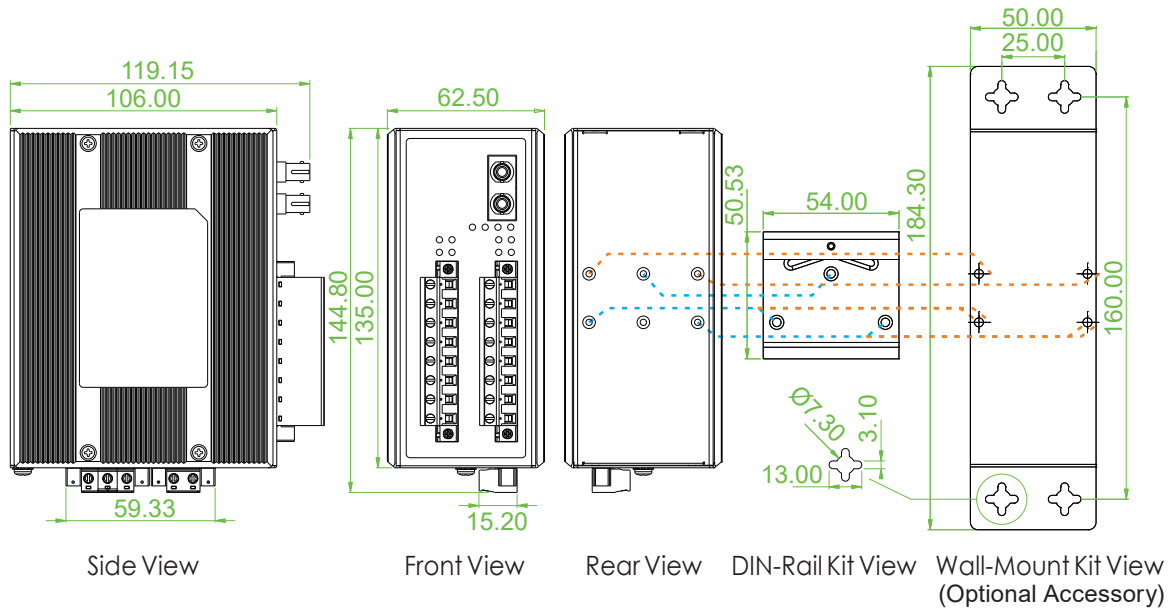


Figure 2 : Application example



Application: High power Gate control Heavy industry automation factory Substation

Dimensions



Related Product



- ◀ **FRM220-CCF40:**
4ch Contact Closure Fiber Converter, In-Band Managed
- ▶ **FRM220-CCF20:**
2ch Contact Closure Fiber Converter, In-Band Managed



- ◀ **IFC-CCF40A:**
4 Ch Contact Closure Input, 4 Relay Output, over Fiber Transmission
- ▶ **IFC-CCF20A:**
2 Ch Contact Closure Input, 2 Relay Output, over Fiber Transmission

Ordering Information

Model Name	Input	Output	Fiber transmission	Power Input	Certification		
					EN61000-6-2 EN61000-6-4	CE	FCC
IFC-BT40	4x Channel Binary	4x MSR Contact Relay	1x SC/ST/Bidi	60~264VAC or 60~300VDC	V	V	V

Connector Type	Connectivity Distance		
SC, ST	Dual fiber	002: M/M 2km	
		030: S/M 30km	
	Single fiber	020A: 20KM Bidi mode A	
		020B: 20KM Bidi mode B	
		Mode A: TX 1310nm/RX1550nm Mode B: TX 1550nm/RX1310nm	

Optional Accessories

Wall Mount Kit

IND-WMK02	Wall Mount kit for Industrial product, 184 x 50mm
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