

## FRM220-CCF40

4 ch. Contact Closure Fiber Converter

## FRM220-CCF20

2 ch. Contact Closure Fiber Converter

The FRM220-CCF contact closure fiber converter comes in two models, one with 2 channels (CCF20) and one with 4 channels (CCF40) and provides the transmission of contact closure over a single fiber optic link. With SFP cage on fiber ports, the FRM220-CCF gives you the fiber cabling connector SFP-LC, both multi-mode and single-mode, as well as BiDi which allows bi-directional transmission using only a single fiber core. The FRM220-CCF has contact inputs and 0.5 amp contact output relays. The relay output follows the "relay input" from the remote end. When the remote "relay input" is shorted, the local relay output is closed and vice-versa. Any one of the relay outputs can be configured to close when "carrier loss" is detected from the remote end. (Either through a CH01M console or via NMC in managed chassis.) Carrier Loss indicates that the optical fiber is disconnected or that the remote end has lost power and is not operating. This "carrier loss" relay can then be connected to an appropriate alarm circuit.

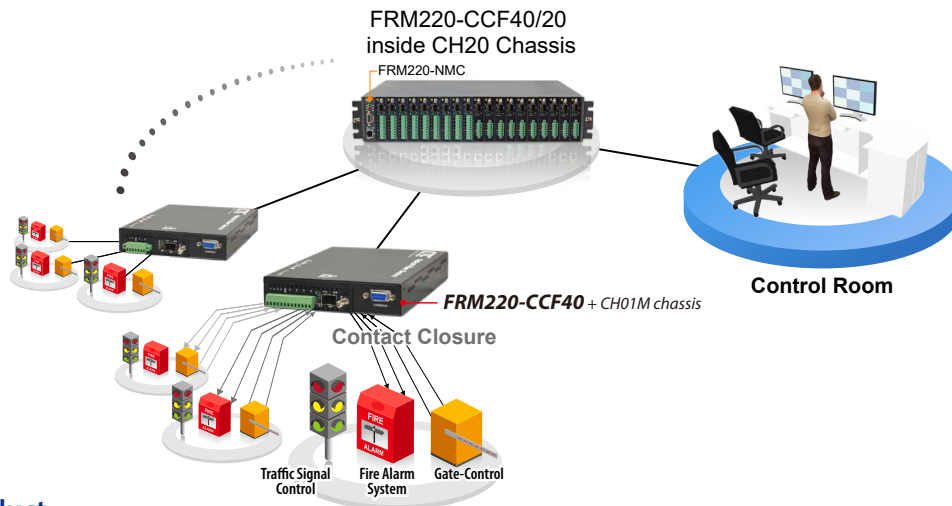
### Features

- Transmits a single contact closure in one or two directions
- Distances up to 120km
- 30 VDC, 0.5 amp relay N.O. (Normally Open)
- Point-to-Point transmission architecture
- Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments
- Relay contact for Carrier Detect, N.C. (Normally Close)
- Indicating LEDs are provided for confirming equipment operating status
- Managed when placed in FRM220 chassis with NMC

### Specifications

<b>Contacts</b>	Contact Interface Response Time : 4 msec Input Dry Contact Closure Output SPST Relay, 30 VDC @ 0.5 A, Resistive loads only. 0.5 A Contact Rating - normally open	<b>Electrical &amp; Mechanical</b>	Current Protection Automatic Resettable Solid-State Current Limiters Circuit Board Meets IPC Standard
<b>Optical</b>	1xSFP/LC (155m)	<b>Dimension</b>	159.5 x 20.8 x 88mm (D x W x H)
<b>Connectors</b>	Optical SFP-LC, Contact, Terminal Block	<b>Weight</b>	200g
<b>LED Indicators</b>	Contact Relay, Carrier Detect	<b>MTBF</b>	>100,000 hours
<b>Power</b>	Operating Voltage Range 8 to 15 VDC Power Consumption 4W Max	<b>Operating Temperature</b>	0°C to +50°C
		<b>Storage Temperature</b>	-10°C to +85°C
		<b>Relative Humidity</b>	0% to 95% (non-condensing) <sup>1</sup>

### Application



### Related Product



#### IFC-CCF40

(Industrial 4 Channel Binary Transducer, 4 binary input, 4 high power MSR Relay output)

### Ordering Information

Model Name	Description
FRM220-CCF40	4ch Contact closure fiber converter
FRM220-CCF20	2ch Contact closure fiber converter