Global leaders in the provision of Plastic Optical Fiber solutions and optical transceivers.

Medical Imaging
Renewable Energy
Electric & Diesel Trains
Industrial Automation
Industrial Drives
Robotics
Smart Grid Automation
Home Networks

2019 Product Catalog



### Firecomms 2019 Product Range

Accelerating the evolution of machine communication

RedLink® Horizontal RedLink® Vertical RedLink® 30°Tilted OptoLock® Transceivers LC Transceivers Plugs Cable Assemblies Accessories POF Cable



## RedLink® Horizontal DC-50 MBd

#### **Transmitter**



#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT50MHNR	Horizontal	DC-50 MBd, 650 nm RCLED, with integrated driver, non-inverting logic	5V/3.3V	
FT50MHIR	Horizontal	DC-50 MBd, 650 nm RCLED, with integrated driver, inverting logic	5V/3.3V	

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR50MHIR	Horizontal	DC-50 MBd, inverting logic	5V/3.3V	
FR50MHNR	Horizontal	DC-50 MBd, non-inverting logic	5V/3.3V	
Not recommende	ed For New Desig	gns (NFND)		
FM50MHIR	Horizontal	DC-50 MBd, inverting logic	5V/3.3V	
FM50MHNR	Horizontal	DC-50 MBd, non-inverting logic	5V/3.3V	

### DC-10 MBd

#### **Transmitter**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FT10MHNR	Horizontal	DC-10 MBd, 650 nm RCLED, non-inverting logic	Analog	
FT10MHLR	Horizontal	DC-10 MBd, low current 650 nm RCLED	Analog	
FT10DHIR	Horizontal	DC-10 MBd, 650 nm RCLED, with integrated driver, inverting logic	5V/3.3V	
FT10DHNR	Horizontal	DC-10 MBd, 650 nm RCLED,with integrated driver, non-inverting logic	5V/3.3V	

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR10DHIR	Horizontal	DC-10 MBd, inverting logic	5V/3.3V	
FR10DHNR	Horizontal	DC-10 MBd, non-inverting logic	5V/3.3V	
Not recommende	ed For New Desig	gns (NFND)		
FM10DHIR	Horizontal	DC-10 MBd, inverting logic	5V/3.3V	
FM10DHNR	Horizontal	DC-10 MBd, non-inverting logic	5V/3.3V	



Receiver





<sup>\* •</sup> Recommended designs<sup>†</sup>

Not recommended For New Designs (NFND)<sup>††</sup>

<sup>†</sup> Firecomms' newest innovation of our world class products.

<sup>#</sup>Firecomms continues to ship and support these NFND products.

#### RedLink® Horizontal

### DC-5 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT05MHNR	Horizontal	DC-5 MBd, 650 nm RCLED, non-inverting logic	Analog	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR05DHDR	Horizontal	DC-5 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR05DHIR	Horizontal	DC-5 MBd, with TTL I/O, dual voltage, inverting logic	5V/3.3V	
FR05DHCR	Horizontal	DC-5 MBd, open collector output, with 1k internal pull-up resistor	5V/3.3V	
Not recommend	ed For New Desig	gns (NFND)		
FM05DHIR	Horizontal	DC-5 MBd with TTL I/O, inverting logic	5V/3.3V	
FM05DHCR	Horizontal	DC-5 MBd, open collector output, with 1k internal pull-up resistor	5V/3.3V	
FM05MHCR	Horizontal	DC-5 MBd, open collector output, 1kOhm pull-up resistor	5V	
FM05MHIR	Horizontal	DC-5 MBd, inverting logic	5V	

### DC-2 MBd

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR20DHIR	Horizontal	DC-2 MBd, 20V open collector output, inverting logic	5V/3.3V	
Not recommende	ed For New Desig	gns (NFND)		
FM20VHIR	Horizontal	DC-2 MBd, 20V open collector output, inverting logic	5V	





<sup>\* •</sup> Recommended designs<sup>†</sup>

Not recommended For New Designs (NFND)<sup>††</sup>

 $<sup>{}^{\</sup>scriptscriptstyle \dagger}\textit{Firecomms'} \textit{newest innovation of our world class products}.$ 

<sup>#</sup>Firecomms continues to ship and support these NFND products.

### DC-1 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT01MHNG	Horizontal	DC-1 MBd, 530 nm Green LED, non-inverting logic	Analog	
FT01MHNR	Horizontal	DC-1 MBd, 650 nm RCLED, non-inverting logic	Analog	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR01DHDR	Horizontal	DC-1 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR01DHIR	Horizontal	DC-1 MBd with TTL I/O, inverting logic	5V/3.3V	
Not recommended For New Designs (NFND)				
FM01MHIR	Horizontal	DC-1 MBd, inverting logic	5V	

### **Analog**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR00AHAR	Horizontal	Analog, 500 um photodiode	Analog	





<sup>\* •</sup> Recommended designs†

Not recommended For New Designs (NFND)<sup>††</sup>

<sup>\*\*</sup> Firecomms continues to ship and support these NFND products.

## RedLink® Vertical DC-50 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT50MVNR	Vertical	DC-50 MBd, 650 nm RCLED, with integrated driver, non-inverting logic	5V/3.3V	
FT50MVIR	Vertical	DC-50 MBd, 650 nm RCLED, with integrated driver, inverting logic	5V/3.3V	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR50MVIR	Vertical	DC-50 MBd, inverting logic	5V/3.3V	
FR50MVNR	Vertical	DC-50 MBd non-inverting logic	5V/3.3V	
Not recommended For New Designs (NFND)				
FM50MVIR	Vertical	DC-50 MBd, inverting logic	5V/3.3V	
FM50MVNR	Vertical	DC-50 MBd, non-inverting logic	5V/3.3V	

### DC-10 MBd

#### **Transmitter**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FT10MVNR	Vertical	DC-10 MBd, 650 nm RCLED, non-inverting logic	Analog	
FT10MVLR	Vertical	DC-10 MBd, low current 650 nm RCLED	Analog	
FT10DVIR	Vertical	DC-10 MBd, 650 nm RCLED, with integrated driver, inverting logic	5V/3.3V	
FT10DVNR	Vertical	DC-10 MBd, 650 nm RCLED, with integrated driver, non-inverting logic	5V/3.3V	





Part Number	Orientation	Description	Supply Voltage	Life Status*
FR10DVIR	Vertical	DC-10 MBd, inverting logic	5V/3.3V	
FR10DVNR	Vertical	DC-10 MBd, non-inverting logic	5V/3.3V	
Not recommend	led For New Desig	gns (NFND)		
FM10DVIR	Vertical	DC-10 MBd, inverting logic, inverting logic	5V/3.3V	
FM10DVNR	Vertical	DC-10 MBd, non-inverting logic	5V/3.3V	

<sup>\* ●</sup> Recommended designs<sup>†</sup>



Not recommended For New Designs (NFND)<sup>††</sup>

 $<sup>{}^{\</sup>dagger}\textit{Firecomms' newest innovation of our world class products}.$ 

<sup>\*\*</sup> Firecomms continues to ship and support these NFND products.

#### RedLink® Vertical

### DC-5 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT05MVNR	Vertical	DC-5 MBd, 650nm RCLED, non-inverting logic	Analog	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR05DVDR	Vertical	DC-5 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR05DVIR	Vertical	DC-5 MBd, with TTL I/O, inverting logic	5V/3.3V	
FR05DVCR	Vertical	DC-5 MBd, open collector output, with 1k internal pull-up resistor	5V/3.3V	
Not recommende	ed For New Desig	gns (NFND)		
FM05DVIR	Vertical	DC-5 MBd, with TTL I/O, inverting logic	5V/3.3V	
FM05DVCR	Vertical	DC-5 MBd, open collector output, with 1k internal pull-up resistor	5V/3.3V	
FM05MVCR	Vertical	DC-5 MBd open collector output, 1kOhm pull-up resistor	5V	

### DC-2 MBd

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR20DVIR	Vertical	DC-2 MBd, 20V open collector output, inverting logic	5V/3.3V	
Not recommende				
FM20VVIR	Vertical	DC-2 MBd, 20V open collector output, inverting logic	5V	





<sup>\* •</sup> Recommended designs†

Not recommended For New Designs (NFND)<sup>††</sup>

 $<sup>^\</sup>dagger$  Firecomms' newest innovation of our world class products.  $^\dagger$  Firecomms continues to ship and support these NFND products.

### DC-1 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT01MVNR	Vertical	DC-1 MBd, 650 nm RCLED, non-inverting logic	Analog	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR01DVDR	Vertical	DC-1 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR01DVIR	Vertical	DC-1 MBd with TTL I/O, inverting logic	5V/3.3V	
Not recommended For New Designs (NFND)				
FM01MVIR	Vertical	DC-1 MBd with TTL I/O, inverting logic	5V	

### **Analog**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR00AVAR	Vertical	500 um photodiode	Analog	





<sup>\* ●</sup> Recommended designs<sup>†</sup>

Not recommended For New Designs (NFND)<sup>††</sup>

<sup>#</sup> Firecomms continues to ship and support these NFND products.

## RedLink® 30° Tilted DC-50 MBd

#### **Transmitter**



Part	Number	Orientation	Description	Supply Voltage	Life Status*
FT50	MWNR	Tilted	DC-50 MBd, 650 nm RCLED, with integrated driver, non-inverting logic	5V/3.3V	
FT50	0MWIR	Tilted	DC-50 MBd, 650 nm RCLED, with integrated driver, inverting logic	5V/3.3V	

#### Receiver



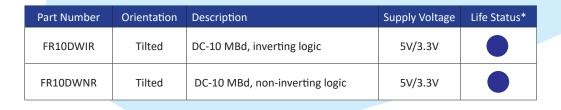
Part Number	Orientation	Description	Supply Voltage	Life Status*
FR50MWIR	Tilted	DC-50 MBd inverting logic	5V/3.3V	
FR50MWNR	Tilted	DC-50 MBd, non-inverting logic	5V/3.3V	

### DC-10 MBd

#### **Transmitter**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FT10MWNR	Tilted	DC-10 MBd, 650 nm RCLED	Analog	
FT10MWLR	Tilted	DC-10 MBd, low current 650 nm RCLED	Analog	
FT10DWIR	Tilted	DC-10 MBd, 650 nm RCLED, integrated driver, inverting logic	5V/3.3V	
FT10DWNR	Tilted	DC-10 MBd, 650 nm RCLED, integrated driver, non-inverting logic	5V/3.3V	









<sup>\* •</sup> Recommended designs<sup>†</sup>

Not recommended For New Designs (NFND)<sup>††</sup>

<sup>†</sup> Firecomms' newest innovation of our world class products.

<sup>#</sup>Firecomms continues to ship and support these NFND products.

### DC-5 MBd

#### **Transmitter**



Part Number	Orientation	Description	Supply Voltage	Life Status*
FT05MWNR	Tilted	DC-5 MBd, 650 nm RCLED	Analog	

#### Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR05DWDR	Tilted	DC-5 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR05DWIR	Tilted	DC-5 MBd with TTL I/O	5V/3.3V	
FR05DWCR	Tilted	DC-5 MBd, open-collector output, with 1k internal pull-up resistor	5V/3.3V	

### DC-1 MBd

#### **Transmitter**

Part Number	Orientation	Description	Supply Voltage	Life Status*
FT01MWNR	Tilted	DC-1 MBd, 650 nm RCLED, non-inverting logic	Analog	



#### Receiver

Part Number	Orientation	Description	Supply Voltage	Life Status*
FR01DWDR	Tilted	DC-1 MBd, 20V open collector output, inverting logic	5V/3.3V	
FR01DWIR	Tilted	DC-1 MBd with TTL I/O, inverting logic	5V/3.3V	



## Analog Receiver



Part Number	Orientation	Description	Supply Voltage	Life Status*
FR00AWAR	Tilted	500 um photodiode	Analog	

- \* ullet Recommended designs<sup>†</sup>
- Not recommended For New Designs (NFND)<sup>††</sup>



<sup>†</sup> Firecomms' newest innovation of our world class products.

<sup>\*\*</sup>Firecomms continues to ship and support these NFND products.

# OptoLock® Transceivers 10/125/250 Mbps



Part Number	Description	Supply Voltage	Life Status*
FB2M5KVR	OptoLock® termination 2.2 mm POF, 10/125/250 Mbps, LVDS, with SD <sup>§</sup> , black, sleep mode	3.3V	
FB2M5BVR	OptoLock® termination 1.5 mm POF, 10/125/250 Mbps, LVDS, with SD <sup>§</sup> , black, sleep mode	3.3V	
FB2M5KRR	OptoLock® termination 2.2 mm POF, 10/125/250 Mbps, LVDS, with RSSI§, black, sleep mode	3.3V	
FB2M5BRR	OptoLock® termination 1.5 mm POF, 10/125/250 Mbps, LVDS, with RSSI <sup>§</sup> , black, sleep mode	3.3V	
Not recomme	nded For New Designs (NFND)		
IDL300T-220	OptoLock® termination 2.2 mm POF, 10/125/250 Mbps with bare fiber, LVDS I/O, black, sleep mode	3.3V	
IDL300T-229	OptoLock® termination 2.2 mm POF, 10/125/250 Mbps with bare fiber, LVDS I/O, white, sleep mode	3.3V	

<sup>&</sup>lt;sup>5</sup> For LVPECL or non-magnetic devices, please contact the Firecomms Sales & Field Applications Engineering team.

### 10/125 Mbps

Part Number	Description	Supply Voltage	Life Status*
Not recommend	ed For New Designs (NFND)		
FB1M2KPR	OptoLock® termination 2.2 mm POF, 10/125 Mbps with bare fiber, with LVPECL I/O, black	3.3V	
EDL300T-220	OptoLock® termination 2.2 mm POF, 10/125 Mbps with bare fiber, with LVDS I/O, black	3.3V	
EDL300T-150	OptoLock® termination 1.5 mm POF, 10/125 Mbps with bare fiber, with LVDS I/O, black	3.3V	
EDL301T-220	OptoLock® termination 2.2 mm POF, 10/125 Mbps with bare fiber, with LVPECL I/O, black	3.3V	
EDL300T-229	OptoLock® termination 2.2 mm POF, 10/125 Mbps with bare fiber, with LVDS I/O, white	3.3V	
EDL301T-229	OptoLock® termination 2.2 mm POF, 10/125 Mbps with bare fiber, with LVPECL I/O, white	3.3V	





<sup>\* ■</sup> Recommended designs<sup>†</sup>

Not recommended For New Designs (NFND)<sup>††</sup>

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<sup>#</sup>Firecomms continues to ship and support these NFND products.

#### **OptoLock® Transceivers**

### DC-50 MBd



Part Number	Description	Supply Voltage	Life Status*
FE50MKNR	OptoLock® termination, with TTL I/O, non-inverting Tx and non-inverting Rx outputs	5V/3.3V	
FE50MKIR	OptoLock® termination, with TTL I/O, non-inverting Tx and inverting Rx outputs	5V/3.3V	

### Analog

Part Number	Description	Supply Voltage	Life Status*
FB00AKAR	OptoLock® termination, 650 nm RCLED, 500 um photodiode with bare fiber	Analog	



Not recommended For New Designs (NFND)††



<sup>\*\*</sup> Firecomms continues to ship and support these NFND products.



<sup>\* ●</sup> Recommended designs<sup>†</sup>

### LC Transceivers

### 10/125/250 Mbps



Part Number	Description	Supply Voltage	Life Status*
FB2M5LVR	LC termination, 10/125/250 Mbps, LVDS, with SD§	3.3V	
FB2M5LRR	LC termination, 10/125/250 Mbps, LVDS, with RSSI§	3.3V	
FB2M5LBR	LC termination, 10/125/250 Mbps, LVDS, with SD <sup>§</sup> , non-magnetic	3.3V	

<sup>§</sup> For LVPECL applications, please contact the Firecomms Sales & Field Applications Engineering team.

### 10/125 Mbps

Part Number	Description	Supply Voltage	Life Status*
Not recommende	ed For New Designs (NFND)		
FB1M2LPR	LC fiber termination, with LVPECL I/O.	3.3V	



### DC-50 MBd



Part Number	Description	Supply Voltage	Life Status*
FE50MLIR	LC termination, and with TTL I/O, non-inverting Tx and inverting Rx outputs	5V/3.3V	
FE50MLNR	LC termination, with TTL I/O, non-inverting Tx and non-inverting Rx outputs	5V/3.3V	



<sup>\* •</sup> Recommended designs†

Not recommended For New Designs (NFND)<sup>††</sup>

<sup>†</sup> Firecomms' newest innovation of our world class products.

<sup>&</sup>lt;sup>††</sup> Firecomms continues to ship and support these NFND products.

### **Plugs**

#### LC plug



	Part Number	Description
	FP-00C-LD0	LC plug for POF
	FG-00D-LZ0	LC plug dust cap

### Simplex friction plugs (no latch)

	Part Number	Description
FP-00C-US0		RedLink® simplex friction plug, blue (crimp ring, no latch)
	FP-00C-VS0	RedLink® simplex friction plug, gray (crimp ring, no latch)



### Simplex friction crimpless plugs



Part Number	Description	
FP-00C-HS0	RedLink® simplex friction plug, gray (crimpless, no latch)	
FP-00C-GS0	RedLink® simplex friction plug, blue (crimpless, no latch)	
FP-00C-TS0	RedLink® simplex friction plug, black (crimpless, no latch)	

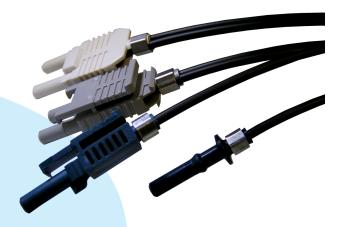
### Simplex latching plugs

Part Number	Description
FP-00C-XS0	RedLink® simplex latching plug, blue (latch and crimp ring)
FP-00C-YS0	RedLink® simplex latching plug, gray (latch and crimp ring)





### **Cable Assemblies**



Part Number	Description
FD-xxx-LDB	xxx m LC duplex patch cord 0.5NA SI-POF
FD-xxx-BSB	xxx m RedLink® simplex patch cable with friction plug 0.5NA SI-POF (gray and blue crimped plugs)
FD-xxx-CSB	xxx m RedLink® simplex patch cable with latch plug 0.5NA SI-POF (gray and blue crimped plugs)
FD-xxx-RDB	xxx m RedLink® duplex patch cable with duplex friction plug 0.5NA SI-POF (gray crimped plugs)
FD-xxx-SDB	xxx m RedLink® duplex patch cable with duplex latch plug 0.5NA SI-POF (gray crimped plugs)
FD-xxx-ASB	xxx m RedLink® simplex patch cable with friction plug 0.5NA SI-POF (gray and Blue crimpless plugs)
FD-xxx-PSB	xxx m RedLink® simplex patch cable with friction plug 0.5NA SI-POF (gray and Black crimpless plugs)
FD-xxx-ADB	xxx m RedLink® duplex patch cable with friction plug 0.5NA SI-POF (gray and Blue crimpless plugs)
FD-xxx-NDB	xxx m RedLink® duplex patch cable with interlocking simplex friction plugs 0.5NA SI-POF (gray crimpless plugs)
FD-xxx-PDB	xxx m RedLink® duplex patch cable with friction plug 0.5NA SI-POF (gray and black crimpless plugs)

Firecomms xxx Code

Length

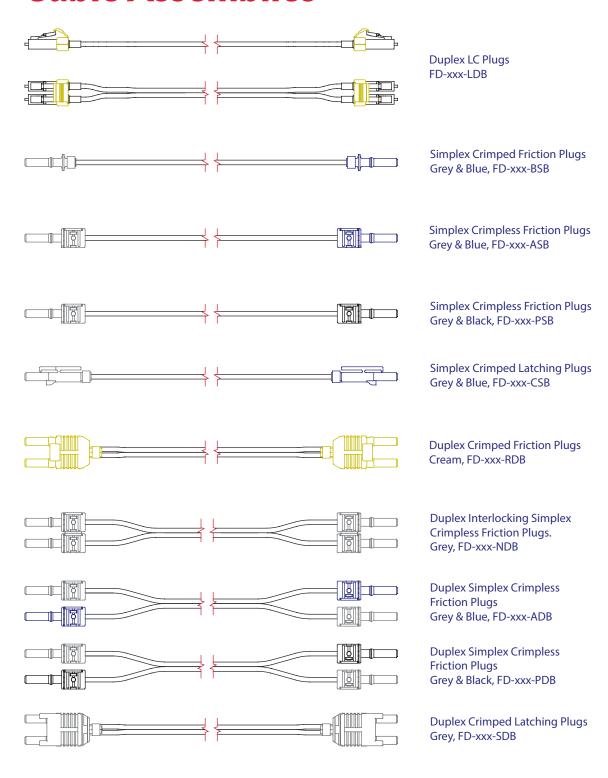
xxC xxM xxcm patch cord (Max 99 cm) xxm patch cord (Max 50 m)

500 500 m reel

Note: For example A 30 cm patch cord would have the code 30C A 5 m patch cord would have the code 05M \* Contact your Firecomms local sales representative for custom cables.



### **Cable Assemblies**



Firecomms xxx Code

Length

xxC xxM 500 xxcm patch cord (Max 99 cm) xxm patch cord (Max 50 m)

500 m reel

Note: For example

A 30 cm patch cord would have the code 30C A 5 m patch cord would have the code 05M

\* Contact your Firecomms local sales representative for custom cables.



### **Accessories**

OptoLock® bulkhead adaptor



LC panel mounted adaptor



### **Plastic Optical Fiber**



Part Number	Description		
FC-500-0SB	500 m Reel 0.5NA SI-POF 2.2 mm simplex		
FC-500-0DB	500 m Reel 0.5NA SI-POF 2.2 mm duplex		





### 2019 **Product Catalog**





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