

# Tecom Challenger Single Mode Fiber Kits



## OVERVIEW

Utilising tested and certified IFS networking solution components, installers can now leverage single mode Fiber cabling to transport the Challenger RS485 LAN.

Two kits are provided, an A side and B side with one of each required to create the connection. The IFS media converters require no configuration and have the option of being managed so users can create monitored installations to ensure maximum network uptime and reporting of failures.

The solution can also be extended by utilising the IFS NS3552-8P-2S-V2 hardened switch.

## INSTALLATION

- **Kits include media converters and SFP modules only**
- **Challenger TS0098 interfaces are required as well as networking accessories**

Network testing is integral to the success of this solution, installers are advised to test the network to ensure ping time does not exceed 35 milli seconds between TS0098 interfaces once installed.

If the above condition is not met, delays on the Challenger LAN may be experienced. Network conditions are the responsibility of the installing party and are not supported by Aritech.

## TS-FIBER-SM-A-KIT CONTAINS

- 1 x MC352-1P/1S
- 1 x S20-1SLC/A-20

## TS-FIBER-SM-B-KIT CONTAINS

- 1 x MC352-1P/1S
- 1 x S20-1SLC/B-20

# Tecom Challenger Single Mode Fiber kits

National Sales Enquiries  
 10 Ferntree Place  
 Notting Hill, Victoria 3168  
 Phone: 1300 361 479  
 Outside Australia: +61 3 9239 1200  
[www.fireandsecurityproducts.com.au](http://www.fireandsecurityproducts.com.au)

## TECHNICAL SPECIFICATIONS

		<b>S20-1SLC/A-20</b> <b>SFP-Port 100Base-Single Fiber GBIC Transc.</b> <b>(TX: 1310nm \ RX: 1550nm) - 20 Km - SM</b>	<b>S20-1SLC/B-20</b> <b>SFP-Port 100Base-Single Fiber GBIC Transc.</b> <b>(TX: 1550nm \ RX: 1310nm) - 20 Km - SM</b>
<b>General</b>	Category	SFP	
	Port type	Single Mode	
	No. of Fibers	1	
	Port speed	Fast	
	Wave length	1310 nm, 1550 nm	
	Maximum distance	20 km	
	Number of Fibers	1	
	Fiber type	Single Mode	
	Max. distance	20 km	
	TX / RX wavelength	1310 nm / 1550 nm	
	Connector	LC	
	Power budget	18	
	PHY type	100Base-BX20-U	100Base-BX20-D
	Power (dBm)	-14 to -8	
	RX Sen. (dBm)	-32	
	Power budget	18	
Reliability (MTBF)	>50,000 hrs @ 25° C		
<b>Electrical</b>	Operating voltage	3.3 VDC	
	AS/NZS CISPR 22	2006	
<b>Physical</b>	Physical dimensions	59 x 15 x 12.4 mm (W x D x H)	
	Net weight	18 g	
<b>Environmental</b>	Operating temperature	0 to +50°C	
	Storage temperature	-40 to +85°C	
	Relative humidity	5% to 95% non condensing	
<b>Regulatory</b>		IEEE 802.3ab Fast Ethernet Standard	
		Class 1 laser product complies with EN 60825-1	
<b>Transmitter Electro-Optical Interface</b>	EMI	EN 55022 CLASS A:2006+A1 : 2007 / EN61000-3-2:2006 / EN61000-3-3: 1995+A1:2001+A2:2005	
	Optical output power	Min. : -14 dBm, Type : - , Max. : -8 dBm	
	Receiver	-32 dBm	

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		<b>MC352-1P/1S</b> <b>Gigabit Ethernet to SFP Industrial Media Converter</b>
<b>General</b>	Category	Industrial
	Type	Ethernet to SFP
	Switch throughput (Mpps)	14.8
	Fault relay output	Yes
<b>Connections</b>	No. of ports	1
	Port speed	Gigabit
	Port type	10/100/1000
	Fiber port	1
	Fiber port type	SFP
	Fiber port speed	1000Base SX/BX/LX/LHX/ZX or 100Base FX/LX/BX
	Supported SFPs	S20/S25 series, S30/S35 series
	Fiber distance	SFP dependant
	Fiber connector	LC
	Wavelength	SFP dependant
<b>Electrical</b>	Power supply type	24 to 48 VDC
	Power consumption	33 W
	PoE	Yes
	PoE/PoE+	1 port PoE+ (802.3at)
	Redundant power	Yes
<b>Physical</b>	Physical dimensions	32 x 87 x 135 mm
	Net weight	500 g
	Mounting type	DIN-rail, Wall mount
<b>Environmental</b>	Operating temperature	-40 to +75°C
	IP rating	IP 30
<b>Ethernet</b>	Data rate	100Base-FX/BX/LX and 1000Base-SX/BX/LX/LHX/ZX
	Throughput (packet per second)	1,488,000pps
	Switch Architecture	Store-and-forward
	Jumbo Packet Size	9 K
	Flow Control	Back Pressure for Half Duplex, Mode Pause for Full-Duplex Mode IEEE 802.3x
	Connector	RJ-45 (Auto-MDI/MDI-X)
	Cable Type and Distance	10Base-T: 2-pair UTP Cat. 3,4,5, up to 100 m (328 ft.) / 100Base-TX: 2-pair UTP Cat. 5e, up to 100 m (328 ft.) / 1000 Base-T: 4-pair UTP Cat. 5e, 6 up to 100m (328 ft.)

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		<b>MC352-1P/1S Gigabit Ethernet to SFP Industrial Media Converter</b>
<b>Fiber</b>	Data rate	1000Base-SX/LX/BX 802.3z
	Connector	SFP (Mini-GBIC) port
	Fiber type and distance	Varies by SFP module
<b>LED Indicator &amp; Controls</b>	Power/Status	Green/On – power
	10/100/1000Base-TX port	Green/On – active port (TX/RX), Amber/On – PoE in-use
	SFP (Mini-GBIC) port link	Green/On – link established
	Reset button	Reset to factory default settings
<b>Electrical &amp; Mechanical</b>	Power	24 ~ 48VDC, 1.4A (33watts)
	Enclosure	Metal
	Dimensions	135 x 85 x 32 mm
	Weight	1.2 lbs. / 500 grams
<b>Environmental</b>	Operating Temperature	-40°C +75°C
	Storage Temperature	-40°C +85°C
	Relative Humidity	5% ~ 90% non-condensing
	MTBF	> 50,000 hrs @ 25°C
<b>Standard Compliance</b>	IEEE	IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / 100Base-FX / IEEE 802.3ab 1000Base-TX / IEEE 802.3z 1000Base-SX/LX/BX / IEEE / 02.3Q VLAN Tagging / IEEE 802.3x Flow Control and Back Pressure / IEEE 802.3p Class of Service
	EMI	EN 55022 CLASS A / EN61000-3-2:2006 / EN61000-3-3: 1995+1A:2001+A2:2005
	EMS	EN 55024:1998+A1:2001+A2:2003 / IEC 61000-4-2:2001 / IEC 61000-4-3:2008 / IEC 61000-4-4:2004 / IEC 61000-4-5:2005 / IEC 61000-4-6:2008 / IEC 61000-4-8:2001
<b>Accessories</b>	PS48VDC100W-DIN	48 VDC Din Rail power supply (100 Watt)



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