

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

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TECHNICAL SPECIFICATIONS

		S20-1SLC/A-20 SFP-Port 100Base-Single Fiber GBIC Transc. (TX: 1310nm \ RX: 1550nm) - 20 Km - SM	S20-1SLC/B-20 SFP-Port 100Base-Single Fiber GBIC Transc. (TX: 1550nm \ RX: 1310nm) - 20 Km - SM
General	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	
Electrical	Operating voltage	3.3 VDC	
	AS/NZS CISPR 22	2006	
Physical	Physical dimensions	59 x 15 x 12.4 mm (W x D x H)	
	Net weight	18 g	
Environmental	Operating temperature	0 to +50°C	
	Storage temperature	-40 to +85°C	
	Relative humidity	5% to 95% non condensing	
Regulatory		IEEE 802.3ab Fast Ethernet Standard	
		Class 1 laser product complies with EN 60825-1	
Transmitter Electro-Optical Interface	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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		MC352-1P/1S Gigabit Ethernet to SFP Industrial Media Converter
General	Category	Industrial
	Type	Ethernet to SFP
	Switch throughput (Mpps)	14.8
	Fault relay output	Yes
Connections	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
Electrical	Power supply type	24 to 48 VDC
	Power consumption	33 W
	PoE	Yes
	PoE/PoE+	1 port PoE+ (802.3at)
	Redundant power	Yes
Physical	Physical dimensions	32 x 87 x 135 mm
	Net weight	500 g
	Mounting type	DIN-rail, Wall mount
Environmental	Operating temperature	-40 to +75°C
	IP rating	IP 30
Ethernet	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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TECHNICAL SPECIFICATIONS

		MC352-1P/1S Gigabit Ethernet to SFP Industrial Media Converter
Fiber	Data rate	1000Base-SX/LX/BX 802.3z
	Connector	SFP (Mini-GBIC) port
	Fiber type and distance	Varies by SFP module
LED Indicator & Controls	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
Electrical & Mechanical	Power	24 ~ 48VDC, 1.4A (33watts)
	Enclosure	Metal
	Dimensions	135 x 85 x 32 mm
	Weight	1.2 lbs. / 500 grams
Environmental	Operating Temperature	-40°C +75°C
	Storage Temperature	-40°C +85°C
	Relative Humidity	5% ~ 90% non-condensing
	MTBF	> 50,000 hrs @ 25°C
Standard Compliance	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 / 802.3Q 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
Accessories	PS48VDC100W-DIN	48 VDC Din Rail power supply (100 Watt)