# SELECTING AN ETHERNET COPPER TO FIBER CONVERTER FOR YOUR NEXT PROJECT



Use the selection table on p2 to select a MiniMc Ethernet Media Converter for your project. Below are a few helpful questions to help narrow your selection.

**Important Consideration** before you get started: This product line supports Auto Negotiation only.

## What speed does the copper port on the device you are connecting to have?

10/100Mbps, 10/100/1000Mbps, 1000Mbps

#### What type of fiber does the application require?

- Single Mode: dual strand or single strand? 1310 or 1550nm wavelength?
- Multi Mode: dual strand or single strand? 850 or 1300nm wavelength?
- SFP form factor (Small Form Pluggable)

# Types of Power Options

- AC power adapter, with country-specific clips
- DC power: terminal block, on IE versions only, and power range varies by product
- Telco power, -48 VDC
- IE-PowerTray/18 slot chassis, AC power, optional purchase
- AC to DC power, IE form factor, optional purchase
- USB cable, optional purchase

#### Does the environment require IE rating, Industrial Ethernet?

- Industrial Ethernet products provides extended temperature rating for harsh environnment installations.
- Industrial Ethernet also requires the DC terminal block to be used as the power source.

### What about the hardware mounting options?

- Velcro strips are included.
- DIN Rail mounting is available. (DIN Rail clips, optional purchase)
- Wall mount bracket is available; wall mount bracket is an optional purchase

#### What diagnostic features are available?

- Link Fault Pass Through (LFPT) is a diagnostic feature that indicates a fault condition.
- Available on select models; check product specifications.

#### Is there Power over Ethernet capability?

- The IE-MiniMc 10/100Mbps can behave as a PD (Power Draw) device if connected to a power injector.

#### Once you have a product selected, you should ask just a few more questions:

- Do you have all the accessories needed to make the needed connections?
- Cables, Power Supplies, Hardware Brackets, DIN Rail Clips?
- When do you need product or samples for proof of concept? When do you plan to go to full production?



Featuring a compact form factor Ethernet Media Converter to install in challenging space constrictions, the MiniMc family of Media Converters offers ease of installation, different hardware mounting options, a variety of power sources and reliable throughput speeds for 10/100, 10/100/1000 and gigabit speeds. Some models are available in Industrial Ethernet, for installations in harsh environments.

#### WHAT IS AUTO-NEGOTIATION?

Auto Negotiation (AN) is an IEEE 802.3 standard for how a device advertises speed and duplex on an Ethernet copper port. AN was ratified in 1998, and most network equipment today offers it. It allows network equipment to advertise speed and duplex and agree to the highest common denominator.

Auto Negotiation makes it easy for the network administrator to leave all devices in the AN mode for speed of installation. Before AN was established and ratified, the FORCE mode was the preferred way to configure networks. The MiniMc series of products supports AN; there is no option for a FORCE mode.

#### **PRODUCT ASSISTANCE**

If you need product selection assistance, contact Advantech B+B SmartWorx technical support.

# ETHERNET COPPER TO FIBER CONVERTER

| PRODUCT SELECTION GUIDE | (continued)



Series:	<u>MiniMc</u>	MiniMc LFPT versions	<u>IE-MiniMc</u>	Giga-MiniMc	Giga-MiniMc - LFPT versions	IE-Giga-MiniMc	IE-Giga-MiniMc - LFPT versions	MiniMc-Gigabit
DSW for LFPT	Select models	Select models	-	-	-	-	~	-
LFPT Capability	Select models	~	-	-	All models, permanently enabled	-	All models, DSW	-
MTU	1916	1916	1916	1536	10240	10240	10240	10240
PD Device	-	-	~	-	-	-	-	-
DC Power	-	-	·	-	-	·	V	-
AC Power	<b>v</b>	<b>✓</b>	·	~	<b>v</b>	·	·	·
DIN Clip	<b>✓</b>	~	·	·	<b>v</b>	·	<b>v</b>	-
IE-5V Power	<b>v</b>	~	~	~	<b>v</b>	V	·	~
Power Options *	AC power supply (included)	AC power supply (included)	AC power supply (included)	AC power supply (included)				
Wallmount Bracket	~	~	~	·	V	~	~	~
Wide Temperature	-	-	~	-	-	<b>✓</b>	·	-
SFP Capability	Select models	Select models	-	-	Select models	-	Select models	-
USB Cable, optional	Single	Single	Single	Dual	Dual	Dual	Dual	Dual
MODEL/SKU# **								
	<u>855-10619</u>	856-11619	855-19720	<u>856-10728</u>	<u>856-11700</u>	<u>856-18825</u>	<u>856-18929</u>	<u>855-10730</u>
	<u>855-10620</u>	<u>856-11620</u>	855-19721	<u>856-10729</u>	<u>856-11701</u>	<u>856-18826</u>	<u>856-18930</u>	<u>855-10731</u>
	<u>855-10621</u>	<u>856-11621</u>	855-19722	<u>856-10730</u>	<u>856-11702</u>	<u>856-18827</u>	<u>856-18931</u>	855-10732
	<u>855-10622</u>	<u>856-11622</u>	<u>855-19723</u>	<u>856-10731</u>	<u>856-11703</u>	<u>856-18828</u>		<u>855-10733</u>
	<u>855-10623</u>	<u>856-11623</u>	<u>855-19724</u>	<u>856-10732</u>	<u>856-11704</u>	<u>856-18830</u>		<u>855-10734</u>
	<u>855-10624</u>	<u>856-11624</u>	<u>855-19725</u>	<u>856-10733</u>	<u>856-11705</u>	<u>856-18831</u>		<u>855-10735</u>
	<u>855-10625</u>	<u>856-11625</u>	<u>855-19726</u>	<u>856-10734</u>	856-11706	<u>856-18832</u>		<u>855-10736</u>
	<u>855-10626</u>	<u>856-11626</u>	<u>855-19727</u>	<u>856-10735</u>	<u>856-11710</u>	856-18833		<u>855-10737</u>
	<u>855-10627</u>	<u>856-11627</u>	855-19730	<u>856-10736</u>	<u>856-11711</u>	856-18834		<u>855-10738</u>
	<u>855-10641</u>	856-11641	855-19750	<u>856-10737</u>	<u>856-11712</u>	856-18835		<u>855-10739</u>
	<u>855-10650</u>	856-11650	855-19751	856-10738	<u>856-11713</u>	856-18836		<u>855-10742</u>
	855-10651	856-11651	855-19752	856-10739	856-11714	856-18837		855-10743
	855-10652	856-11652	855-19753	<u>856-10742</u>	856-11742	856-18838		<u>855-10744</u>
	855-10653	856-11653	855-19754	856-10743	856-11743	856-18839		855-10745
	855-10654	856-11654	855-19755	856-10744	856-11744	856-18840		
	855-10655	856-11655	855-19756	856-10745	856-11745	856-18841		
	<u>855-10656</u>	<u>856-11656</u>	<u>855-19757</u>	<u>856-10747</u>		<u>856-18842</u>		
	855-10657	856-11657	1	†	†	i .	†	I

 $<sup>^{*}</sup>$  All models are available without a power supply. Use 854- prefix. Or, call for details.



 $<sup>\</sup>ensuremath{^{**}}$  The model# defines the fiber type and connector type. Check website for more details.

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