# 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?



## About the MiniMc series

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 (AN)?

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.

All product specifications are subject to change without notice.

# 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	-	-	-	-	V	-
LFPT Capability	Select models	~	-	-	All models, permanently enabled	-	All models, DSW	-
MTU	1916	1916	1916	1536	10240	10240	10240	10240
PD Device	-	-	~	-	-	-	-	-
DC Power	-	-	~	-	-	<b>✓</b>	·	-
AC Power	~	V	~	~	V	<b>✓</b>	~	V
DIN Clip	<b>✓</b>	V	~	V	V	<b>V</b>	~	-
IE-5V Power	<b>v</b>	~	V	~	<b>✓</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	~	~	V	~	V	~
Wide Temperature	-	-	V	-	-	V	~	-
SFP Capability	Select models	Select models	-	-	Select models	-	Select models	-
USB Cable, optional	Single	Single	Single	Dual	Dual	Dual	Dual	Dual
MODEL/SKU# **								
	855-10619	856-11619	855-19720	856-10729	<u>856-11705</u>	<u>856-18827</u>	856-18929	<u>855-10730</u>
	<u>855-10620</u>	856-11620	855-19721	<u>856-10730</u>	856-1170 <u>6</u>	<u>856-18828</u>		<u>855-10731</u>
	<u>855-10621</u>	856-11621	855-19722	856-10730-ST	<u>856-11744</u>	<u>856-18830</u>		
	<u>855-10622</u>	<u>856-11622</u>	855-19723	<u>856-10731</u>	<u>856-11745</u>	<u>856-18831</u>		
	<u>855-10623</u>	856-11623	855-19724	856-10732		<u>856-18832</u>		
	855-10624	856-11624	855-19725	856-10733		<u>856-18835</u>		
	855-10625	856-11625	855-19730	856-10734		<u>856-18836</u>		
	<u>855-10626</u>	856-11626	855-19752	856-10735		856-18838		
	855-10627	856-11627	855-19753	856-10738				
	855-10650	856-11641		856-10739				
	855-10651	856-11650		856-10747				
	855-10652	856-11651						
	855-10653	856-11652						
		856-11653						
		856-11654						
		856-11655	1					



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

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

<sup>\*\*</sup>The model# defines the fiber type and connector type. Check website for more details. NEMATS 2 (select models). Contact B+B SmartWorx