TECHNICAL SPECIFICATION

PRODUCT	BEACON-500-A-F
Transmission Distance ¹	500 m (1500 ft)
Data Transmission Speed	125 Mbps
Transmission Protocol	Fast Ethernet - Full Duplex
Ethernet Connection	RJ-45 port
Transmission Device	Laser Diode
Laser Wavelength	850 ± 15nm (standard)
Laser Output Power	10 mW
Beam Divergence	2 mrad
Safety Laser Class	Class 1M
Receiving Device	Avalanche PD
Auto –Alignment ²	Yes
Auto-Tracking ²	Yes
Operating Temperature	-10°C ~ +50°C
Range	
Storage Temperature	-40°C ~ +85°C
Power	DC 12V - 5A
Power Consumption	Approx. 20W
Installation ³	Indoor or outdoor – 2 inch pole holder standard
	interface
Dimensions (mm)	400 (Length) x 308 (Width) x 167 (Height)
Dimensions (in)	15.75 x 6.57 x 12.125
Weight	6 Kgr (13 lbs)
Shipping Weight	8 Krg (17 lbs)
Management	PC based software to access status and actively control
	device through the LAN
ORDERING	B-500-A-F

1. Transmission distance is affected by weather conditions.

2. Patent pending.

3. Detailed installation instructions can be found in the device manual.



In a typical application, a first free space transceiver is mounted on the rooftop of a building and is connected to an Ethernet switch or a router in the building with a CAT-5 copper cable. Typically, the Ethernet switch is part of a Local Area Network (LAN) within the building. Similarly, a second free space transceiver is mounted on the rooftop of a second building and is connected to an Ethernet switch or a router in that building. During installation, the first and second free space optics transceivers need to be aligned so that each one sees the signal of the other. Detailed alignment instructions are provided with the product documentation. With the auto-alignment option, each transceiver does not need to be precisely aligned by the user but just to be pointed in the general direction of the other. Then, the auto-alignment system will perform all required adjustments to establish a link between the two devices. After the free space link is established the two LANs are seamlessly connected to each other, as if the two Ethernet switches were connected to each other with a copper cable.