OUTDOOR
1 PORT
GATORLINK

A fiber/copper media converter and PoE injector
The outdoor GatorLink is a fiber/copper media converter and PoE injector in a unique, IP67 rated package. The device can be installed in almost any environment and does not require the use of additional NEMA enclosures for protection. All connections to and from the device are made with rugged pre-terminated ODVA style connectors that make installation a breeze. Standard Ethernet cables can only carry PoE up to 90 meters from the source. Our hybrid copper/fiber cabling system can extend that distance up to 5000 meters. The cable can come pre-terminated on one or both ends depending on the preference of the installer.

**KEY FEATURES**

- **100base FX, LX and 1000base SX & LX fiber port options**
- **10/100/1000base TX copper ports**
- **PoE (15w), PoE+ (30w) and PoE++ (60w) power sourcing equipment (PSE) capabilities**
- **no need to purchase separate NEMA enclosures, cable grips, etc.**
- **uses revolutionary new IP67 rated connector for both fiber/power connectivity**
- **connection to your PoE device is made using standard category cable with IP67 rated RJ45**
- **-40°C to +70°C operating temperature**
- **discreet profile and adaptable design that allows for installation almost anywhere**
The Outdoor GatorLink uses a revolutionary new connector to bring both fiber (data) and copper (power) into the device. The connector is based on the industry standard ODVA LC connector footprint except it now has the added functionality of being able to transmit power when terminated on hybrid (fiber/copper) cable. Fiber Connections offers a full line of hybrid cables to complement the Outdoor GatorLink. Refer to our Hybrid Cable Assembly data sheet for additional information about these assemblies.

The maximum cable length limits are determined by considering the following.

The max length of fiber based on both the fiber type and Ethernet speed (see figure 2 below), AND
The max length of copper required based on the wire gauge and power levels (see figure 1 below)
After consulting both tables, always select the lowest value specified between the two.

### POWER DISTANCE LIMITS

<table>
<thead>
<tr>
<th>Configuration</th>
<th>P/Ns (x variable = fiber comm type, y variable = fiber type shown below)</th>
<th>Max cable distance (m) using 4x12awg</th>
<th>Max cable distance (m) using 2x12awg</th>
<th>Max cable distance (m) using 2x18awg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 port PoE (tri spd)</td>
<td>GR10xPSyC0S-001</td>
<td>7500</td>
<td>3750</td>
<td>950</td>
</tr>
<tr>
<td>1 port PoE+ (tri spd)</td>
<td>GR10xPPyC0S-001</td>
<td>2500</td>
<td>1250</td>
<td>300</td>
</tr>
<tr>
<td>1 port PoE++ (tri spd)</td>
<td>GR10xPHyC0S-001</td>
<td>1300</td>
<td>650</td>
<td>155</td>
</tr>
</tbody>
</table>

Figure 1

### FIBER DISTANCE LIMITS

<table>
<thead>
<tr>
<th>Comm protocol</th>
<th>Fiber Type</th>
<th>Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100BaseFx = variable F</td>
<td>50/125 OM3 = variable 9</td>
<td>2000</td>
</tr>
<tr>
<td>100BaseFx = variable F</td>
<td>50/125 OM4 = variable A</td>
<td>2000</td>
</tr>
<tr>
<td>100BaseLx = variable G</td>
<td>SM OS2 = variable S</td>
<td>5000</td>
</tr>
<tr>
<td>1000Base Sx = variable B</td>
<td>50/125 OM3 = variable 9</td>
<td>550</td>
</tr>
<tr>
<td>1000Base Sx = variable B</td>
<td>50/125 OM4 = variable A</td>
<td>1100</td>
</tr>
<tr>
<td>1000Base Lx = variable C</td>
<td>SM OS2 = variable S</td>
<td>5000</td>
</tr>
</tbody>
</table>

Figure 2
# OUTDOOR 1 PORT GATORLINK

## ORDERING INFORMATION AND TECHNICAL SPECIFICATIONS

### GR10 - COS-001

<table>
<thead>
<tr>
<th>Communication</th>
<th>Power Out</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 10/100/1000T &amp; 1000BaseSX</td>
<td>PS Remote: PoE 15w / Source: 20w Term. Blk.</td>
<td>9 50/125 OM3</td>
</tr>
<tr>
<td>C 10/100/1000T &amp; 1000BaseLX</td>
<td>PP Remote: PoE+ 30w / Source: 65w for PoE+ &amp; PoE++</td>
<td>A 50/125 OM4</td>
</tr>
<tr>
<td>F 10/100/1000T &amp; 100BaseFX</td>
<td>PH Remote: PoE++ 60w / Source: NA</td>
<td>S 50/125 OM5</td>
</tr>
<tr>
<td>G 10/100/1000T &amp; 100BaseLX</td>
<td>00 None</td>
<td>- SM OS2</td>
</tr>
</tbody>
</table>

### Standards
- Ethernet: IEEE Std. 802.3i/u/ab/z, Power Over Ethernet IEEE 802.3at

### Controls
- No manual controls

### Housing
- Material: ABS/Aluminum housing
- Interfaces: Fiber and low voltage DC power enters the housing on the end face via hybrid outdoor connector. PoE enabled output Ethernet port is on the opposite end face in an ODVA style outdoor connector.
- Size: 2” diameter cylindrical body with mounting provisions on each end. Total length 10”.

### Power Source
- Requires 42 to 57VDC DC, PoE+ Model - 40 watts, PoE++ Model -80 watts on 2 conductor outdoor shrouded connector

### Channels
- 1 media conversion channel using 2 incoming fibers in outdoor hybrid connector and 1 outdoor ODVA RJ45 Jack.

### Primary Fiber Optic Port
- LC duplex in outdoor shrouded connector

### Pass Through Fiber Port
- none

### Fiber Type
- OM1, OM2/OM3/OM4 or SM as defined by model P/N

### Wavelength
- 1300nm or 850nm (1G), 1310nm (SM) as defined by model P/N

### Fiber Tx/Rx Speed
- 100Mbps or 1Gbps as defined by model P/N

### Mode
- Full Duplex

### Distance
- Link length limited by Fiber transmission limit and DC Power transmission Limits:
  - Fiber length Limit: -100BaseFX, 1300nm, OM3 - up to 2 km
  - 100BaseLX, 1310nm, OS2 - up to 5 km
  - 100Base SX, 850nm, OM3 - up to 550m
  - 1000BaseLX, 1310nm, OS2 - up to 5km

### Optical Loss Budget
- MM: 10 to 15dB depending on configuration
- SM: 16 to 29dB depending on configuration as defined by model P/N

### Copper Port
- 8P8C (RJ-45) Modular Socket outdoor shrouded bayonet

### Copper Tx/Rx Speed
- 10/100/1000Mbps auto negotiated

### Mode
- Half duplex or full duplex auto negotiated

### Distance
- 100M (330 ft) cat 5/6

### POE
- 50-57VDC, PSE output upon PD negotiation, over current protection (802.3at). Provides up to 30W output on 2 copper pairs (Mode B Midspan) of the RJ45, optionally PoE++ Model provides up to 60 watts output on 4 copper pairs (Mode A & B simultaneous).

### RX/TX Cross-over
- Auto MDI, MDIX configuration

### Indicators
- none

### Weight
- 0.5kg

### Temperature
- Operating: -40C to +70C
- Storage: -40 to 85 degrees C

### Environment
- Outdoor

### Compliance
- Radiation: CFR FCC Part 15 Subpart B.
- Lightning Surge: IEC61000-4-5

### Special
- V Booster: Maintain valid PoE output (V>50V) with Vin as low as 42VDC
- Lightning Surge Suppression: 4 stage surge suppression to meet industry spec. IEC61000-4-5

### Configurations
- a) Fiber Link: 100BaseFX or LX, or 1000BaseSX or LX PoE Injection: PoE, PoE+ or PoE++