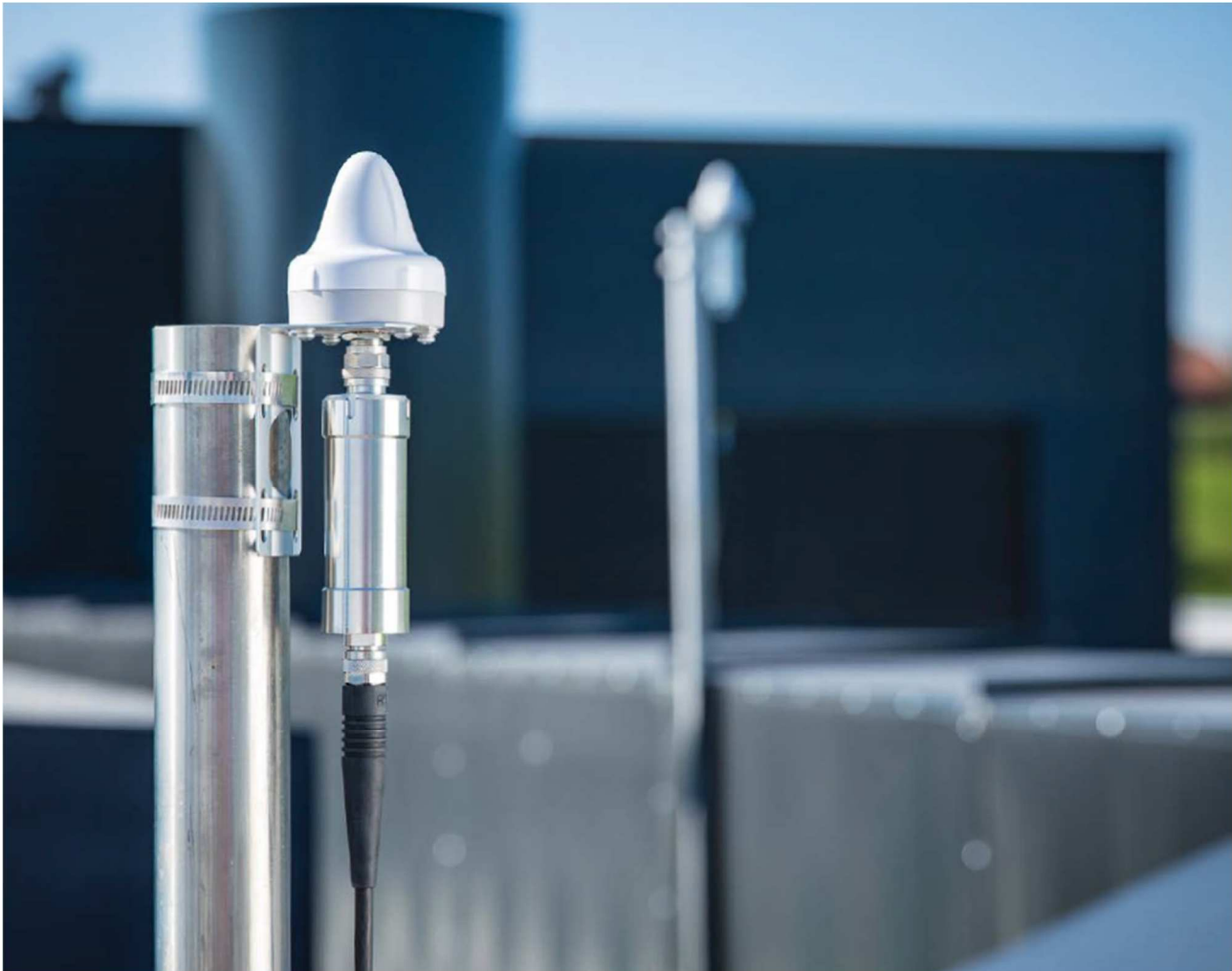


## GPS over Fiber System

### Quick Installation Guide



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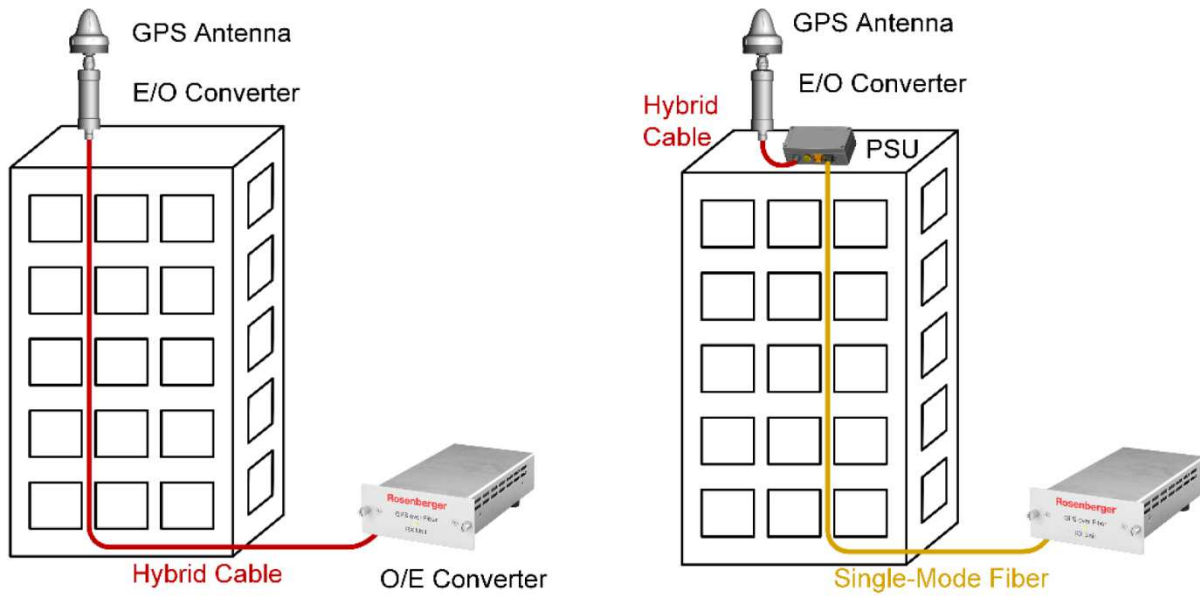
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## 1 Overview

Quick guide to install Rosenberger GPS Antenna solution.

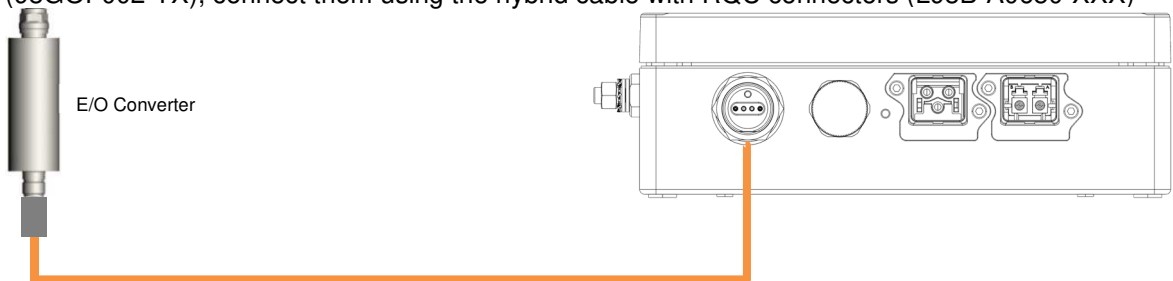


## 2 Connecting the System

1. Connect the E/O Converter directly to the GPS antenna (GPSGlonass-36-N-SC)



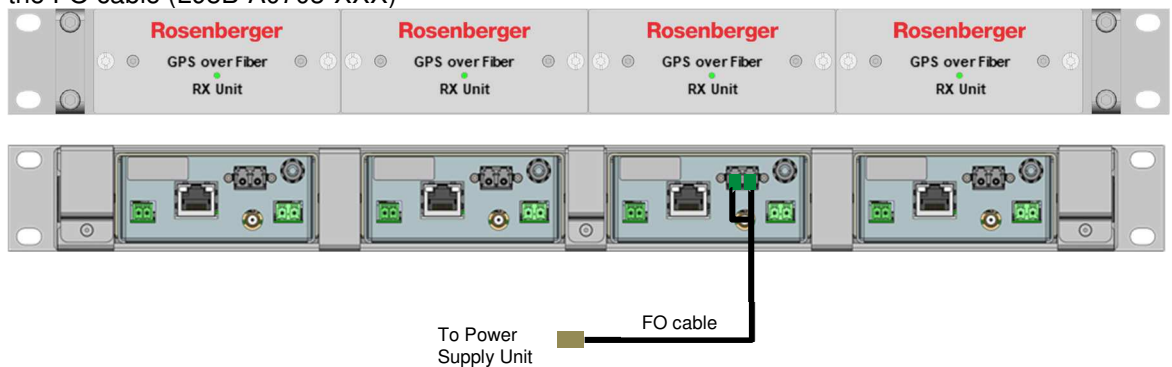
2. If the Power Supply Unit (98GOF002-PSU) will supply power for the to the E/O Converter (98GOF002-TX), connect them using the hybrid cable with RQC connectors (L98B-A0650-XXX)



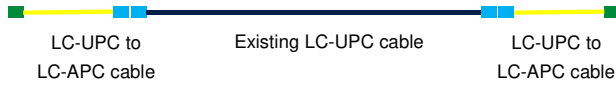
If the power for the O/E Converter (98GOF102-RX) is supplying the power for the E/O Converter, connect them directly by using the hybrid cable with RQC-LCD APC+Power connectors (L98B-A0651-XXX)



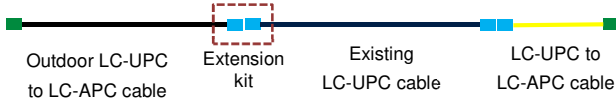
3. When using the Power Supply Unit, connect the O/E Converter to the Power Supply Unit with the the FO cable (L98B-A0703-XXX)



Be aware that the optical interfaces for both Power Unit and O/E Converter are LC-APC. If there is an existing LC-UPC cable, a LC-UPC to LC-APC patch cord must be used. For indoor installations, consider the L98B-A0666-XXX patch cord.

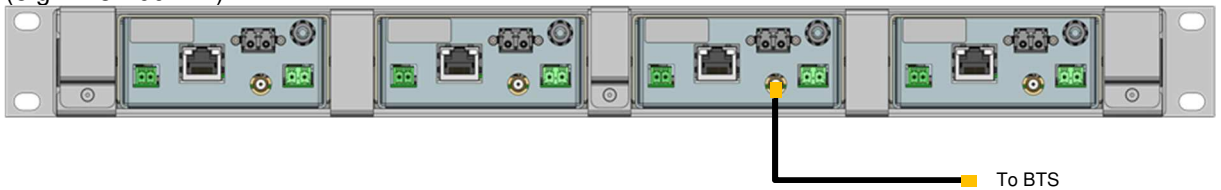


If an outdoor connection between the Power Supply Unit and the existing LC-UPC – LC-UPC cable, consider the L98B-A0806-xxx outdoor cable combined with the 98K100-130-L2 cable extension kit.

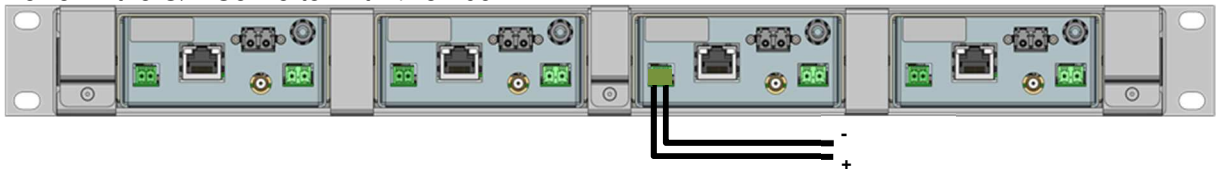


**Attention:** It is important, that the E/O Converter and the hybrid cable are properly connected prior to powering the system. Before opening the connection between E/O Converter and Hybrid cable, the Power must always be switched off.

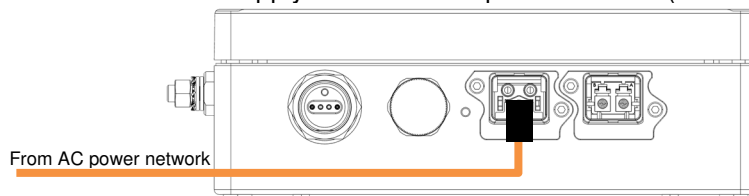
4. Connect the O/E Converter to the BTS using the RTK 057 with SMA-SMA cable assembly (e.g. LY8-100-xxx)



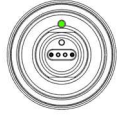



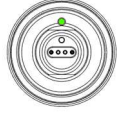






5. Power in the O/E Converter with +48 Vdc



6. Connect the Power Supply Unit to the AC power network (L99-A0447-3000)



### 3 Status LEDs

E/O Converter	O/E Converter	Status	Troubleshooting
 LED green	 LED green	All systems work properly.	No action required
 LED red	 LED red	GPS antenna defect or not connected	Check the active GPS antenna
 LED green	 LED red	Laser E/O converter defect or E/O converter is not connected to O/E converter	<ol style="list-style-type: none"> <li>1) Check the fibers between E/O and O/E converter</li> <li>2) Change O/E converter, if fiber link is ok</li> <li>3) Change E/O converter, if fiber link and O/E converter is OK</li> </ol>
 LED blue		E/O converter in boot process / Laser calibration process	Will be automatically finished after 30 to 60 seconds
	 LED blue	E/O converter is booting or O/E converter is calibrating.	Wait until boot up is completed and LED switches to green.
	 LED purple	Part of the booting sequence of the O/E converter	Will be automatically finished after 15 seconds
 No LED		E/O converter is down	<ol style="list-style-type: none"> <li>1) Check power supply of E/O converter</li> <li>2) Change E/O converter</li> </ol>
	 No LED	O/E converter is down	<p>Check power supply of O/E converter</p> <p>Change O/E converter</p>

## 4 Bill of Materials

Rosenberger Part Number	Description
GPSGlonass-36-N-SC	GPS active antenna
98GOF002-TX	E/O Converter
98GOF001-PSU	Power Supply Unit (PoE version)
98GOF002-PSU	Power Supply Unit (AC version)
L99-A0447-3000	PSU power supply cable
L98B-A0650-xxx	Shielded hybrid cable, RQC connectors, XXX m
L98B-A0703-xxx	FO cable, PSU to O/E Converter, SM
L98B-A0651-xxx	Shielded hybrid cable, RQC – LCD-APC, XXX m
98GOF002-RX	O/E converter (single module)
98GOF101-RX	O/E Converter (1x module + 19" enclosure)
98GOF102-RX	O/E Converter (2x module + 19" enclosure)
L98B-A0666-xxx	FO indoor patch cord, LC-APC - LC-PC, XX m
L98B-A0806-xxx	FO outdoor, LC-APC outdoor - LC-PC, XX m
98K100-130-L02	Flexible cable extension kit
98LCK8LC-K03-BU	LC-PC – LC-PC duplex adapter
LY8-100-xxx	Coax cable, RTK 057, SMA – SMA, XXX m