# BOM for GQ7 GNSS Antenna with Higher Power Requirements

# RELEASED EXTERNALLY TO CUSTOMERS

# BOM

For each antenna, the connection to the GQ7 goes into port A of the bias-tee. The Novatel antenna connects to port B, and you need to fashion a cable to provide 5.5-10V power to the DC in port of each bias-tee. All of these cables are standard RF coax cables and are available at your preferred electronics vendor. In total, you will need:



## 2 - Vexxis GNSS-850 Antennas

- These provide superior multipath rejection through their pinwheel design and integrated groundplane.
- "TRACKING IN CHALLENGING ENVIRONMENTS: The ability to track low elevation satellites while maintaining a high gain for higher elevation satellites makes the GNSS-850 an excellent choice for any application where the sky is partially visible, such as operating close to tree lines, under foliage, or in urban canyons." More info on website

### 2 – TNC Male to TNC Female cables

- To connect from the bias-tee (Port B) to the GNSS850 antennas (length depending on mounting)
- 2 TNC Male to Female SMA adapter
- To convert from TNC connection port (Port A) to SMA for the GQ7's SMA to MMCX adapter cables
- TNC to SMA adapters can also be connected by a cable if flexibility assembly is more convenient for applications with space constraints

#### 2 - SMA Male to SMA Female cables

- For the connection from the converters above to the SMA to MMCX pigtail we provide (length depending on mounting)
- 1 GQ7-GNSS/INS

### 1 - set of 2 x SMA Male to MMCX Female connector cables

- From connector to GQ7's MMCX jack (to GNSS receivers)
- Specific part: 6212-3020 Adapter Cable

## 2 - 5.5 - 10 V TNC Bias tee

- For external power supply due to GNSS850 antenna's 3.8 V min voltage requirement and GQ7's MMCX connector 3.0 V max voltage output
- We have been impressed with Tallysman's products and use these TW155 Bias-Tees for our rooftop antennas
- For convenience the link provided is a NavTech GPS link same supplier as GNSS850 antennas

# 2 - TNC Male to TNC Female cables

• You will need to open up and wire to a voltage input of 5.5-10V. If you don't have this voltage available on your application, you will need to find a DC-to-DC converter to step down your 12V bus (assuming that's what the vehicle has) to 9V (most easy to find converter.)

# External Power Supply

• Output voltage of 9 V, 0.56 A over SMA Male with whatever input connection is most convenient for your application