

## Step 1

- 1.1 - Mount & install **2x High-Gain Antennas** on the external roof (*preferred*) or wall of the building.
- 1.2 - Ensure that the antennas are kept a minimum of 300mm apart from one-another, with a **minimum of 5 meters apart from any other pre-existing communications equipment**, & that they are not covered or obstructed by any metal, brick or concrete walls, ceilings, poles or structures.
- 1.3 - Run a length of **Coaxial Antenna Cabling** from each external antenna's mounted position, back to the Damstra Terminal inside the building. (*Avoid using any excess of cabling length, as this may affect signal quality*).
- 1.4 - Terminate each end of the cabling with the appropriate **SMA Connectors** to suit.

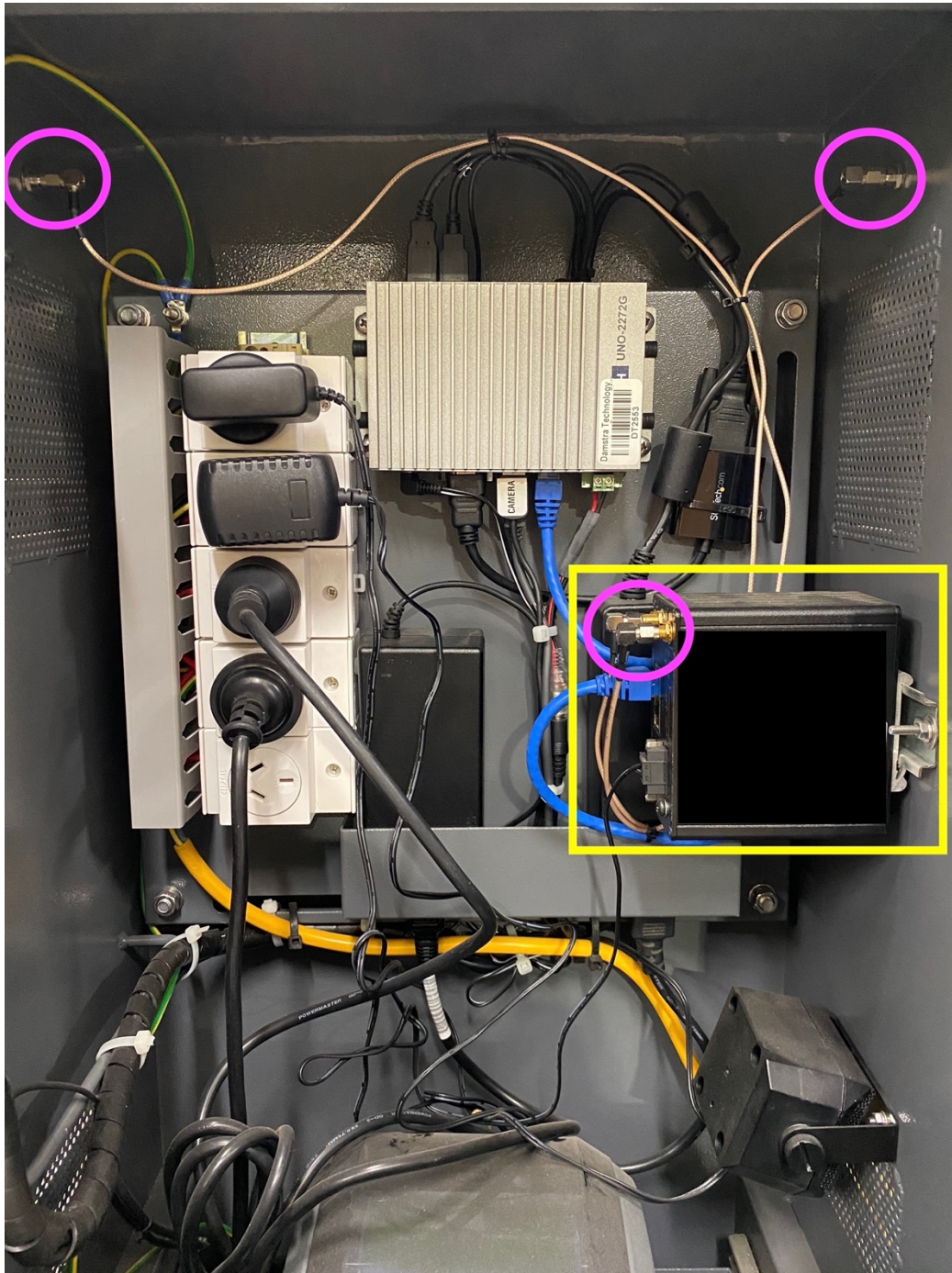
## Step 2

- 2.1 - Unscrew the existing standard antennas from each external side of the Damstra Terminal cabinet (white).
- 2.2 - Connect each of the new High-Gain Antenna cabling runs to each side of the Damstra Terminal (**purple**).  
(When correctly installing **2x High-Gain Antennas per Terminal**, the orientation of left / right side is not important).



## Step 3

- 3.1 - Unlock & open the Damstra Terminal cabinet door. Locate the Modem (*highlighted in yellow*), & ensure that all internal & external connections (*highlighted in purple*) are connected properly & are tight.
- 3.2 - Locate the power adapter for the Modem, & switch off / or disconnect it from mains power.
- 3.3 - Wait **5 minutes**, then reconnect the Modem power adapter to mains power.
- 3.4 - Close & lock the Damstra Terminal cabinet door & **allow up to 15 minutes** for the Modem to automatically assess the available signal strength & establish a cellular connection.
- 3.5 - (*Please store any removed or un-used modem & antenna equipment inside the Damstra Terminal cabinet*)



## Notes

Damstra Terminals using externally mounted antennas should always be connected to **two** individual High-Gain Antennas, to maintain a strong cellular connection.

In the event that one of these becomes damaged, or is unavailable, it is *possible (but is not recommended)* to attempt a network connection for a Damstra Terminal using only one External Antenna & one standard antenna (depending on the cellular signal quality available in the area).

To do this, the High-Gain Antenna **must** be connected to the “**MAIN**” or “**CELLULAR**” connector on the modem. While the smaller standard antenna **must** be connected to the “**RxDIV**” or “**DIVERSITY**” connector on the modem.



## Notes Continued

To determine **which connector** to use in this particular situation, please trace the internal Coaxial Cabling from the SMA Bulkhead Adapter (*mounted through the top / sides of the Terminal cabinet*), back down to the connectors on the modem.  
(*pictured above, & also in Step 3*).

Yellow = Modem.

Purple = SMA Connections.

Green = The primary MAIN / CELLULAR Connector.

Blue = The secondary RxDIV / DIVERSITY Connector.

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**Modem Status Indicators** are highlighted in Orange in the image above.

The LED lights which are shown here will display the current status of the cellular network.

**No LED lights** = No power to Modem, or Modem is rebooting, please wait.

**STS / NET : Solid or Flashing Green** - Network Connecting / or is Connected.

**STS / NET : Flashing Orange or Red** - Poor Signal or Not Connected, please wait.

**Signal / Network : Solid or Flashing Green** = Network Connecting / or is Connected.

**Signal / Network : Flashing Orange or Red** = Poor Signal or Not Connected, please wait.

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**If connection issues persist** after completing the above, please:

- 1 - Confirm that a good 4G Cellular Signal is available in the area where the Damstra Terminals & External Antennas are installed.
- 2 - Check all SMA connections & cables are connected properly & are free from any damages.
- 3 - Ensure that the antennas are kept a minimum of 300mm apart from one-another, with a minimum of 5 meters apart from any other pre-existing communications equipment, & that they are not covered or obstructed by any metal, brick or concrete walls, ceilings, poles or structures.
- 4 - Avoid using any excess of cabling length, as this may affect signal quality.
- 5 - Power off the modem for 5 minutes.
- 6 - Power the modem back on, & allow up to 15 minutes for the Modem to automatically assess the available signal strength & establish a cellular connection.
- 7 - Contact Damstra Technology – Service Delivery Team at [service@damstratechnology.com](mailto:service@damstratechnology.com) or 1300 722 801. Please include the Site Name, the location of the Terminal, the Terminal's Serial / Identification Number, and any relevant information about the issue.