## Lightning Protection

- To ensure proper protection from lightning it is important than the mounting mast is properly grounded using earth strapping and spikes into moist soil.
- Please note that this antenna has an integrated DC short at the bracket end, this ensures no static buildup in the antenna and also provides additional lightning protection.
- To further reduce the risk a direct lightning strikes to the antenna, a horizontal pole can be mounted approximately 500 mm above the antenna as shown in the figure.
- Further lightning protection can be installed in line between the antenna and the radio equipment.


## LPDA-0092-04

## Packing Check List

| Item | Description | Quantity |
| :---: | :--- | :---: |
| LPDA-0092-04 |  |  |
| 1 | $698-3000 \mathrm{MHz}$ High Gain Directional LTE Antenna <br> with 0.3 m HDF195 N(f) cable | 1 |
|  | Bracket Kit |  |
| 3 | Econo-bracket | 2 |
| 4 | U-Bolt (SS) M6x65x112mm | 2 |
| 5 | M6 Washers (SS) | 4 |
| 6 | M6 Nuts (SS) | 4 |

## Packing Check List

- The LPDA-0092-04 antenna is supplied with all fasteners and bracket to allow for mast mounting on up to 65 mm diameter poles. The antenna has two mounting options:
a. The dual U Bolt mounting option fixes the antenna's boom 90 degrees to the mounting mast.
b. The single U Bolt mounting option allows for vertical tilting of The antenna.

LPDA-0092-04_PCL Version: R3 1 of 4

## Two U Bolt Mounting method:

- Assemble the bracketry on the mast as shown in the exploded diagram and tighten nuts finger tight.
- Align the antenna in the direction of the base station, please bear in mind the antenna has a beamwidth of approximately 55 degrees.
- Fasten nuts on U bolts with 10 mm wrench/spanner,but do not overtighten.
- Be sure to provide strain release for the cable by securing it the mounting structure near the antenna using a cable-tie (not provided).


## Single U Bolt Mounting method:

- Assemble the bracketry on the mast as shown in the exploded diagram and tighten nuts finger tight.
- Align the antenna in the direction of the base station in both vertical and horizontal position. Please bear in mind that the
 antenna has a beamwidth of approximately 55 degrees in the horizontal plane and 50 degrees in the vertical plane.
- Fasten nuts on U bolts with 10 mm wrench/spanner, but do not over tighten
- Be sure to provide strain release for the cable by securing it the mounting structure near the antenna using a cable-tie (not provided).
- The single U bolt mounting allows
the antenna to be adjusted in the vertical plane by approximately 26 degrees up and down from the. horizontal position.



## Operational Instructions

- Connect an appropriate device or suitable cable extension to the antenna via the SMA-connector on the end of the cable attached to the antenna. Seal the connection with Self Amalgamating or Butal Tape to ensure no water ingress.
- Final antenna alignment can be achieved by monitoring the signal strength indicator of the communication device to which the antenna is connected for maximum signal strength.
- The antenna is now ready for use.

