





# VLQ24593xN4N

# Vehicular 4-Port MIMO Antenna 2400-2500 MHz/4900-5925 MHz

The VLQ24593xN4N vehicular four-port MIMO Wi-Fi disk/ puck antenna covers the 2400-2500 MHz/ 4900-5925 MHz bands and is configured with four-port, dual-band elements.

The four Wi-Fi ports have RP-SMA male cable plug connectors. The housing incorporates a low-profile, rugged design that meets IP67 standards. The antenna also features high impact, UV-resistant polycarbonate plastic available in black or white.

## **ELECTRICAL SPECIFICATIONS**

| Number of Ports                           | 4-ports (Wi-Fi)       |               |  |
|---|-----------------------|---------------|--|
| Operating Frequency (MHz)                 | 2400-2500             | 4900-5925     |  |
| Peak Gain* (dBi)                          | 2.2                   | 3.5           |  |
| Max Gain +/- 30°<br>Above Horizon (dBi)   | N/A                   | 3.5           |  |
| VSWR** Typical                            | < 1.4:1               | < 1.4:1       |  |
| VSWR** Max                                | < 2.0:1               | < 2.0:1       |  |
| Port-to-Port Isolation **<br>Max (dB)     | 20                    | 26            |  |
| Typical Port-to-Port Isolation **<br>(dB) | 2400-2500 MHz         | 4900-5925 MHz |  |
| Port 1-to-Port 2                          | > 23                  | > 28          |  |
| Port 1-to-Port 3                          | > 20                  | > 26          |  |
| Port 1-to-Port 4                          | > 20                  | > 26          |  |
| Port 2-to-Port 3                          | > 25                  | > 26          |  |
| Port 2-to-Port 4                          | > 21                  | > 26          |  |
| Port 3-to-Port 4                          | > 21                  | > 28          |  |
| Nominal Impedance (Ohms)                  | 50 Ω                  |               |  |
| Max Power per port - Ambient<br>25°C (W)  | 10                    |               |  |
| Polarization                              | Vertical Linear       |               |  |
| Azimuth Beam Width                        | 360°, Omnidirectional |               |  |

\*Measured on a 30.5 cm (1 ft) diameter ground plane

\*\* Measured with 518 cm (17 ft) of cable

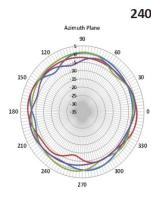
| MECHANICAL SPECIFICATIONS              |                                   |  |  |
|--|-----------------------------------|--|--|
| Dimensions, mm (")                     | 127 x 38.5 (5.0 x 1.52)           |  |  |
| Weight, kg (lbs)                       | Approximately 0.91 (2.01)         |  |  |
| Cable Type- Exposed Length, meter (ft) | LMR®-195 or equivalent- 5.18 (17) |  |  |
| Radome Material                        | PC, UL94 - VO Rating, UV Stable   |  |  |

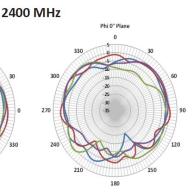
| ENVIRONMENTAL SPECIFICATIONS              |                                  |  |  |  |
|---|----------------------------------|--|--|--|
| Operating Temperature (°C)                | -35°C to +75°C (-31°F to +167°F) |  |  |  |
| Storage Temperature (°C)                  | -35°C to +80°C (-31°F to +176°F) |  |  |  |
| IP Dust & Water Ingress Protection Rating | IP67                             |  |  |  |
| Material Substance Compliance             | RoHS                             |  |  |  |

# **CONFIGURATION**

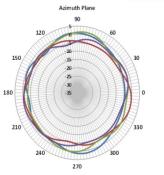
| PART NUMBER       | CABLE LENGTH    | CONNECTOR       | COLOR |
|-------------------|-----------------|-----------------|-------|
| VLQ24593BN4N-518B | 518 cm (17 ft.) | 4x- RP-SMA male | Black |
| VLQ24593WN4N-518B | 518 cm (17 ft.) | 4x- RP-SMA male | White |
| VLQ24593BN4N-213G | 213 cm (7 ft.)  | 4x- SMA male    | Black |
| VLQ24593WN4N-213G | 213 cm (7 ft.)  | 4x -SMA male    | White |

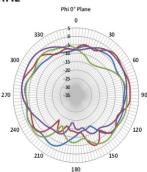
### **RADIATION PATTERNS**





2500 MHz





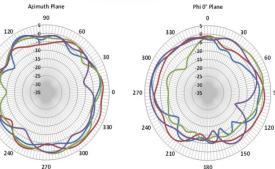
2440 MHz Phi 0° Plane Azimuth Plane 90 0 120 150 180 270 210 240 240 210 150 270 180

4900 MHz

150

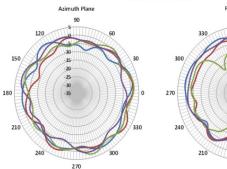
210

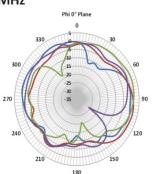
180

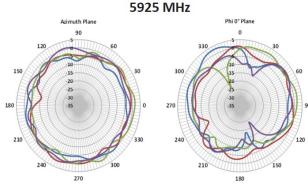


120

5400 MHz







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