



## Sierra Wireless Antenna – 9-in-1 Dome

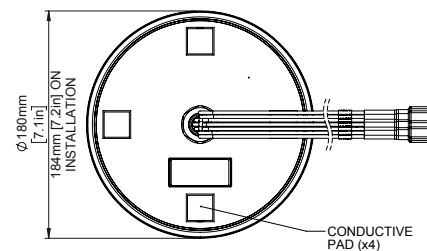
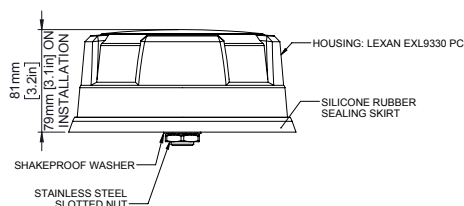
The 9-in-1 Dome is a custom 5G single antenna solution for the AirLink XR90, tested and certified for mobile applications.

The antenna has a low-profile design that contains nine isolated high-performance antenna elements in a single housing for optimal coverage; four ultra-wideband elements spanning 617-6000MHz; a high performance GNSS antenna with an integrated 26dB gain LNA; and 4x4 MIMO dual band 2.4/5GHz Wi-Fi elements.

|                                 |                  | Specification                   |      |
|---------------------------------|------------------|---------------------------------|------|
| <b>PART NO.</b>                 |                  | 6001399 (Black)/6001400 (White) |      |
| <b>ELECTRICAL DATA</b>          |                  |                                 |      |
| <b>Frequency Range</b>          | 4G/5G Elements   | 617-960MHz / 1710-6000MHz       |      |
|                                 | Wi-Fi Elements   | 2.4/4.9-6GHz                    |      |
| <b>Peak gain: Isotropic*</b>    | 4G/5G Elements   | 617-960MHz                      | 4dBi |
|                                 |                  | 1710-3800MHz                    | 6dBi |
|                                 |                  | 4900-6000MHz                    | 6dBi |
|                                 | Wi-Fi Elements   | 2.4 GHz                         | 5dBi |
|                                 |                  | 4.9-6.0GHz                      | 7dBi |
| <b>Isolation*</b>               | 4G/5G Elements   | > 10dBm                         |      |
|                                 | Wi-Fi Elements   | > 12dBm                         |      |
| <b>Typical Efficiency</b>       | 4G/5G Elements   | 617-960MHz                      | >50% |
|                                 |                  | 1710-3800MHz                    | >60% |
|                                 |                  | 4900-6000MHz                    | >35% |
|                                 | Wi-Fi Elements   | 2.4GHz                          | >60% |
|                                 |                  | 5.0GHz                          | >45% |
| <b>Correlation Co-efficient</b> | 4G/5G Elements   | <0.2                            |      |
| <b>Pattern</b>                  | Omni-directional |                                 |      |
| <b>Impedance</b>                | 50Ω              |                                 |      |

\*Simulated off a groundplane and does not include cable attenuation

|                        |             | Specification                |
|------------------------|-------------|------------------------------|
| <b>GPS/GNSS DATA</b>   |             |                              |
| Frequency Range        |             | 1562-1612MHz                 |
| VSWR                   |             | <2.1 ± 4MHz                  |
| Gain: LNA              |             | 26dB                         |
| Out of Band Rejection  |             | > 35dB                       |
| Rejection at 787MHz    |             | > 50dB                       |
| Typical Noise Figure   |             | -2.7dB                       |
| Operating Voltage      |             | 3-5V DC                      |
| Typical Current        |             | 15mA                         |
| <b>MECHANICAL DATA</b> |             |                              |
| Dimensions             | Height      | 80mm (3.1")                  |
|                        | Diameter    | 180mm (7.1")                 |
| Operating Temp         |             | -40° / +80°C (-40° / +176°F) |
| Colour                 |             | Black/White                  |
| Ingress Protection     |             | IP69K                        |
| <b>MOUNTING DATA</b>   |             |                              |
| Mounting Type          |             | Bolt Mount                   |
| Mounting Hole          |             | 19mm (3/4")                  |
| <b>CABLE DATA</b>      |             |                              |
| Cellular Cables        | Type        | C32                          |
|                        | Length      | 5m (16')                     |
|                        | Termination | FAKRA D (Purple)             |
| GPS Cable              | Type        | CS29                         |
|                        | Length      | 5m (16')                     |
|                        | Termination | FAKRA C (Blue)               |
| Wi-Fi Cables           | Type        | C32                          |
|                        | Length      | 5m (16')                     |
|                        | Termination | FAKRA I (Beige)              |



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