



Making Factories Smarter

# vSensPro

## Antenna Specifications

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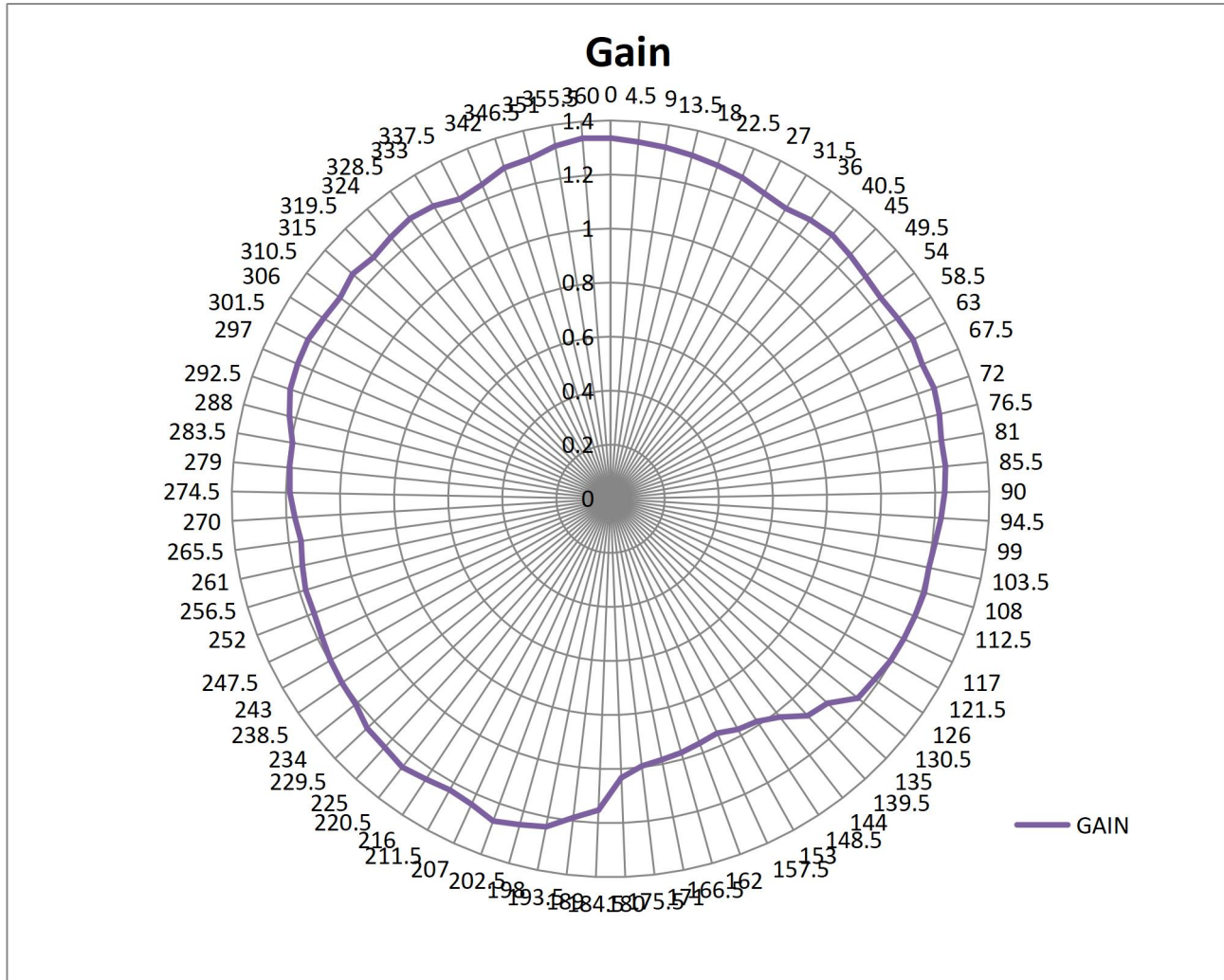
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## 1. Product E-Plane Pattern 2.4 GHz

| SI No. | Frequency (GHz) | Angle (f°) | S21 (dB) | Gain (dB) |
|--------|-----------------|------------|----------|-----------|
| 1      | 2.45            | 0          | -32.4948 | 1.3352    |
| 2      | 2.45            | 4.5        | -32.6155 | 1.3245    |
| 3      | 2.45            | 9          | -33.0835 | 1.3165    |
| 4      | 2.45            | 13.5       | -33.7136 | 1.3064    |
| 5      | 2.45            | 18         | -34.3444 | 1.2956    |
| 6      | 2.45            | 22.5       | -34.8553 | 1.2847    |
| 7      | 2.45            | 27         | -35.2747 | 1.2653    |
| 8      | 2.45            | 31.5       | -35.6552 | 1.2548    |
| 9      | 2.45            | 36         | -35.9911 | 1.2689    |
| 10     | 2.45            | 40.5       | -36.8152 | 1.2748    |
| 11     | 2.45            | 45         | -37.8265 | 1.2635    |
| 12     | 2.45            | 49.5       | -38.5486 | 1.2514    |
| 13     | 2.45            | 54         | -39.4849 | 1.2451    |
| 14     | 2.45            | 58.5       | -40.5264 | 1.2536    |
| 15     | 2.45            | 63         | -41.6461 | 1.2639    |
| 16     | 2.45            | 67.5       | -42.1152 | 1.2548    |
| 17     | 2.45            | 72         | -42.4362 | 1.2638    |
| 18     | 2.45            | 76.5       | -43.9152 | 1.2548    |
| 19     | 2.45            | 81         | -44.3985 | 1.2415    |
| 20     | 2.45            | 85.5       | -45.0464 | 1.2436    |
| 21     | 2.45            | 90         | -46.1949 | 1.2351    |
| 22     | 2.45            | 94.5       | -45.8465 | 1.2235    |
| 23     | 2.45            | 99         | -45.9796 | 1.2104    |
| 24     | 2.45            | 103.5      | -46.7565 | 1.2035    |
| 25     | 2.45            | 108        | -46.5796 | 1.2104    |
| 26     | 2.45            | 112.5      | -46.1345 | 1.2055    |
| 27     | 2.45            | 117        | -46.8688 | 1.2012    |
| 28     | 2.45            | 121.5      | -48.6942 | 1.1958    |
| 29     | 2.45            | 126        | -50.0176 | 1.1824    |
| 30     | 2.45            | 130.5      | -50.1755 | 1.1745    |
| 31     | 2.45            | 135        | -50.3778 | 1.1022    |
| 32     | 2.45            | 139.5      | -49.2764 | 1.0836    |
| 33     | 2.45            | 144        | -47.6085 | 1.0215    |
| 34     | 2.45            | 148.5      | -48.1044 | 0.9856    |
| 35     | 2.45            | 153        | -49.7858 | 0.9742    |
| 36     | 2.45            | 157.5      | -51.4877 | 0.9523    |

|    |      |       |          |        |
|----|------|-------|----------|--------|
| 37 | 2.45 | 162   | -53.1476 | 0.9624 |
| 38 | 2.45 | 166.5 | -55.8852 | 0.9748 |
| 39 | 2.45 | 171   | -55.9864 | 0.9836 |
| 40 | 2.45 | 175.5 | -53.6046 | 0.9954 |
| 41 | 2.45 | 180   | -52.6274 | 1.0326 |
| 42 | 2.45 | 184.5 | -54.8674 | 1.1526 |
| 43 | 2.45 | 189   | -58.4025 | 1.1875 |
| 44 | 2.45 | 193.5 | -59.9735 | 1.2365 |
| 45 | 2.45 | 198   | -55.3986 | 1.2514 |
| 46 | 2.45 | 202.5 | -53.3314 | 1.2686 |
| 47 | 2.45 | 207   | -52.4785 | 1.2415 |
| 48 | 2.45 | 211.5 | -52.0299 | 1.2301 |
| 49 | 2.45 | 216   | -50.8285 | 1.2415 |
| 50 | 2.45 | 220.5 | -49.6637 | 1.2563 |
| 51 | 2.45 | 225   | -49.9582 | 1.2418 |
| 52 | 2.45 | 229.5 | -50.0435 | 1.2365 |
| 53 | 2.45 | 234   | -50.8896 | 1.2104 |
| 54 | 2.45 | 238.5 | -50.2362 | 1.2038 |
| 55 | 2.45 | 243   | -48.4346 | 1.1954 |
| 56 | 2.45 | 247.5 | -46.8974 | 1.1826 |
| 57 | 2.45 | 252   | -47.1955 | 1.1745 |
| 58 | 2.45 | 256.5 | -46.9138 | 1.1762 |
| 59 | 2.45 | 261   | -46.3447 | 1.1653 |
| 60 | 2.45 | 265.5 | -46.2458 | 1.1542 |
| 61 | 2.45 | 270   | -46.1711 | 1.1689 |
| 62 | 2.45 | 274.5 | -46.0946 | 1.1854 |
| 63 | 2.45 | 279   | -45.6776 | 1.1924 |
| 64 | 2.45 | 283.5 | -44.2665 | 1.1935 |
| 65 | 2.45 | 288   | -43.3246 | 1.2254 |
| 66 | 2.45 | 292.5 | -42.7186 | 1.2514 |
| 67 | 2.45 | 297   | -42.3504 | 1.2596 |
| 68 | 2.45 | 301.5 | -41.8665 | 1.2635 |
| 69 | 2.45 | 306   | -41.0769 | 1.2531 |
| 70 | 2.45 | 310.5 | -39.5537 | 1.2463 |
| 71 | 2.45 | 315   | -37.8647 | 1.2653 |
| 72 | 2.45 | 319.5 | -36.8486 | 1.2514 |
| 73 | 2.45 | 324   | -36.6362 | 1.2638 |
| 74 | 2.45 | 328.5 | -36.3552 | 1.2748 |
| 75 | 2.45 | 333   | -35.8142 | 1.2658 |
| 76 | 2.45 | 337.5 | -35.2585 | 1.2415 |

|    |      |       |          |        |
|----|------|-------|----------|--------|
| 77 | 2.45 | 342   | -34.7337 | 1.2563 |
| 78 | 2.45 | 346.5 | -34.1635 | 1.2865 |
| 79 | 2.45 | 351   | -33.5365 | 1.2935 |
| 80 | 2.45 | 355.5 | -32.9285 | 1.3215 |
| 81 | 2.45 | 360   | -32.5116 | 1.3384 |



## 2. Product H-Plane Pattern 2.4 GHz

| SI No. | Frequency (GHz) | Angle (f°) | S21 (dB) | Gain (dB) |
|--------|-----------------|------------|----------|-----------|
| 1      | 2.45            | 0          | -32.2485 | 1.3215    |
| 2      | 2.45            | 4.5        | -32.2575 | 1.3125    |
| 3      | 2.45            | 9          | -32.7542 | 1.2958    |
| 4      | 2.45            | 13.5       | -33.6555 | 1.2845    |
| 5      | 2.45            | 18         | -34.8835 | 1.2765    |
| 6      | 2.45            | 22.5       | -36.4965 | 1.2635    |
| 7      | 2.45            | 27         | -38.4459 | 1.2541    |
| 8      | 2.45            | 31.5       | -40.4896 | 1.2104    |
| 9      | 2.45            | 36         | -42.8946 | 0.9754    |
| 10     | 2.45            | 40.5       | -45.0785 | 0.9215    |
| 11     | 2.45            | 45         | -46.4648 | 0.8452    |
| 12     | 2.45            | 49.5       | -47.0749 | 0.7451    |
| 13     | 2.45            | 54         | -47.6547 | 0.6253    |
| 14     | 2.45            | 58.5       | -48.1748 | 0.4152    |
| 15     | 2.45            | 63         | -48.8648 | 0.3652    |
| 16     | 2.45            | 67.5       | -49.4636 | 0.2564    |
| 17     | 2.45            | 72         | -49.3535 | 0.2365    |
| 18     | 2.45            | 76.5       | -48.7146 | 0.2154    |
| 19     | 2.45            | 81         | -49.8746 | 0.1854    |
| 20     | 2.45            | 85.5       | -52.9975 | 0.1325    |
| 21     | 2.45            | 90         | -54.9515 | 0.1285    |
| 22     | 2.45            | 94.5       | -55.0474 | 0.1526    |
| 23     | 2.45            | 99         | -54.7144 | 0.2356    |
| 24     | 2.45            | 103.5      | -54.0648 | 0.3152    |
| 25     | 2.45            | 108        | -55.4485 | 0.3215    |
| 26     | 2.45            | 112.5      | -57.1375 | 0.3625    |
| 27     | 2.45            | 117        | -54.6752 | 0.3748    |
| 28     | 2.45            | 121.5      | -53.4445 | 0.3955    |
| 29     | 2.45            | 126        | -53.1285 | 0.4215    |
| 30     | 2.45            | 130.5      | -51.4186 | 0.5214    |
| 31     | 2.45            | 135        | -50.9276 | 0.6124    |
| 32     | 2.45            | 139.5      | -51.9868 | 0.6532    |
| 33     | 2.45            | 144        | -51.3668 | 0.6632    |
| 34     | 2.45            | 148.5      | -51.1553 | 0.6847    |
| 35     | 2.45            | 153        | -53.4558 | 0.7142    |
| 36     | 2.45            | 157.5      | -56.8065 | 0.7235    |

|    |      |       |          |        |
|----|------|-------|----------|--------|
| 37 | 2.45 | 162   | -56.8735 | 0.7365 |
| 38 | 2.45 | 166.5 | -56.4155 | 0.7845 |
| 39 | 2.45 | 171   | -55.4958 | 0.8142 |
| 40 | 2.45 | 175.5 | -55.5738 | 0.8562 |
| 41 | 2.45 | 180   | -58.2675 | 0.8325 |
| 42 | 2.45 | 184.5 | -62.4386 | 0.8214 |
| 43 | 2.45 | 189   | -66.9455 | 0.7845 |
| 44 | 2.45 | 193.5 | -66.2749 | 0.7251 |
| 45 | 2.45 | 198   | -60.7575 | 0.6325 |
| 46 | 2.45 | 202.5 | -57.8286 | 0.5214 |
| 47 | 2.45 | 207   | -57.4474 | 0.5326 |
| 48 | 2.45 | 211.5 | -55.3675 | 0.6124 |
| 49 | 2.45 | 216   | -53.7475 | 0.6325 |
| 50 | 2.45 | 220.5 | -54.0852 | 0.6748 |
| 51 | 2.45 | 225   | -55.9285 | 0.7215 |
| 52 | 2.45 | 229.5 | -54.1642 | 0.6958 |
| 53 | 2.45 | 234   | -52.3055 | 0.6745 |
| 54 | 2.45 | 238.5 | -52.8375 | 0.6325 |
| 55 | 2.45 | 243   | -53.2275 | 0.6125 |
| 56 | 2.45 | 247.5 | -53.8752 | 0.5748 |
| 57 | 2.45 | 252   | -54.5438 | 0.5462 |
| 58 | 2.45 | 256.5 | -54.2085 | 0.5215 |
| 59 | 2.45 | 261   | -53.9248 | 0.4152 |
| 60 | 2.45 | 265.5 | -56.6785 | 0.4215 |
| 61 | 2.45 | 270   | -54.9344 | 0.3856 |
| 62 | 2.45 | 274.5 | -51.8085 | 0.3415 |
| 63 | 2.45 | 279   | -51.2085 | 0.3215 |
| 64 | 2.45 | 283.5 | -50.3259 | 0.2541 |
| 65 | 2.45 | 288   | -49.0232 | 0.3268 |
| 66 | 2.45 | 292.5 | -48.5548 | 0.4152 |
| 67 | 2.45 | 297   | -47.6886 | 0.5214 |
| 68 | 2.45 | 301.5 | -48.3347 | 0.6253 |
| 69 | 2.45 | 306   | -49.4552 | 0.7548 |
| 70 | 2.45 | 310.5 | -48.6826 | 0.8574 |
| 71 | 2.45 | 315   | -46.7248 | 0.9352 |
| 72 | 2.45 | 319.5 | -45.2714 | 0.9586 |
| 73 | 2.45 | 324   | -44.1346 | 1.0254 |
| 74 | 2.45 | 328.5 | -42.4474 | 1.1526 |
| 75 | 2.45 | 333   | -40.4785 | 1.2415 |
| 76 | 2.45 | 337.5 | -38.5246 | 1.2654 |

|    |      |       |          |        |
|----|------|-------|----------|--------|
| 77 | 2.45 | 342   | -36.6405 | 1.2895 |
| 78 | 2.45 | 346.5 | -34.9898 | 1.3102 |
| 79 | 2.45 | 351   | -33.6411 | 1.3389 |
| 80 | 2.45 | 355.5 | -32.7538 | 1.3362 |
| 81 | 2.45 | 360   | -32.2835 | 1.3265 |

