AllDisc-S MIMO Wi-Fi 6E, 3-in-1 Antenna

Combination Antennas – Cellular+Wi-Fi 710633



Low-profile, whipless combination antenna with a compact and durable design that delivers optimal performance and support of multi-carrier voice and data networks.

Technologies

- 2G / 3G / 4G / 5G
- Wi-Fi 6E

Features

- 3-in-1 combination antenna
- 2×2 MIMO for Wi-Fi 6E 2/5/6GHz
- Easy to install
- IP6K9K class
- Cable approved acc ECE-R118
- IATF 16949







710452 - AllDisc

bracket

710598 - Slitted nut

710206 – Extension nut to be used on AllDisc with long screw enabling installation thickness 25-50mm

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AllDisc-S by Smarteq, a PCTEL company, is a 3-in-1 antenna including cellular 2/3/4/5G and 2x2 MIMO Wi-Fi 6E 2/5/6GHz with a low profile and durable design, making it perfect for M2M applications, Internet Onboard, EV-charging and Smart Metering. The superior RF performance enables high connectivity and throughput. The AllDisc-S has been successfully tested for durability according to Volkswagen automotive test standards.

Features

- Radio System: 2/3/4/5G + Wi-Fi 6E
- Cellular Frequencies: 698-960 MHz, 1710-2690 MHz, 3400-3800 MHz
- Wi-Fi Frequencies: 2400-2485/4900-6000 MHz
- 2×2 MIMO for Wi-Fi 2/5/6GHz
- Discreet design with center screw installation
- Verified according to VW test requirements
- IATF 16949

Applications

- Off-Highway Vehicle (OHV)
- ECU/Gateway
- M2M
- Smart Metering
- Smart City
- EV-chargers
- Vending machine
- Parking meter

Certifications





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Standard Configurations

| Model | Elements | Cable | Cable Length | Code | Connector | Housing Color | Mount | Accessories |
|--------|-----------|-------------|-----------------|------|------------|-----------------------------------|--|--|
| 710633 | Cellular | RG316, grey | 0.20m | D | FAKRA-Male | Black (Optional white or grey) | Hole mount with center screw and adhesive tape | 710452 – AllDisc bracket 710598 – Slitted nut 710206 – Extension nut |
| | Wi-Fi (1) | RG316, grey | 0.25m | 1 | FAKRA-Male | | | |
| | Wi-Fi (2) | RG316, grey | 0.30m | 1 | FAKRA-Male | | | |

Electrical Specifications – RF Antenna

| Frequency Ranges | VSWR ¹ | Peak Gain ² | Efficiency ³ | Correlation Factor | Nominal Impedance | Polarization | Radiation Characteristics | Maximum Power ⁴ | DC Short |
|------------------|-------------------|---------------------------|-------------------------|-----------------------|----------------------|------------------|------------------------------|-------------------------------|-------------|
| LTE / 5G | | | | | | | | | |
| 617 - 698 MHz | < 4.5:1 | 1 dBi | 50% | | | | | | |
| 698 - 880 MHz | ≤ 2:1 | 4.5 dBi | 89% | | | | | | |
| 880 - 960 MHz | ≤ 2.5:1 | 5 dBi | |] | | | | | |
| 1710 - 1880 MHz | | 5 dBi | | | | | | | |
| 1710 - 2690 MHz | ≤ 3:1 | 4.5 dBi | | <0.02 | 50Ω | Linear, vertical | Omnidirectional | 10 watts | Yes |
| 1710 - 2170 MHz | | | 89% | | | | | | |
| 1920 - 2170 MHz | | 4.5 dBi | | | | | | | |
| 2500 - 2690 MHz | | 3.5 dBi | 88% | | | | | | |
| 3300 - 3800 MHz | ≤ 3:1 | 7 dBi | 82% | | | | | | |
| Wi-Fi 6E (1 & 2) | | | | | | | | | |
| 2400 - 2485 MHz | ≤ 2:1 | 8 dBi | 80% | < 0.02 | 50Ω | Linear, vertical | Omnidirectional | 10 watts | |
| 4900 - 7200 MHz | ≤ 2:1 | 10 dBi | 65% | <0.02 | | | | | |

¹ VSWR values are measured at the end of 0.5m cable without a ground plane.

² Peak Gain values measured on ground plane (excluding cable) ³Antenna efficiency measured ?

⁴ Maximum power measured at ambient temperature of 25°C



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Mechanical and Environmental Specifications

| Physical | |
|---------------------------------|-----------------------|
| Dimensions (D x H) | 96 x 55 mm |
| Weight | ~150g |
| Radome Construction | PC/PBT/Aluminum alloy |
| Operating / Storage Temperature | -40°C to +85°C |
| IP Class | ІР6К9К |

Extension Cables

| Part Number | Cable Length | Connector | Gender | Code | |
|-------------|--------------|-----------|---------------|------|--|
| LL58 Cable | | | | | |
| 710606 | 2.5m | FAKRA/SMA | Female/Male | Z/ | |
| 710608 | 2.5m | FAKRA | Female/Female | D | |
| 710609 | 2.5m | FAKRA | Female/Female | С | |
| 710610 | 2.5m | FAKRA | Female/Female | I | |
| 710607 | 5.0m | FAKRA/SMA | Female/Male | Z/ | |
| 710611 | 5.0m | FAKRA | Female/Female | D | |
| 710612 | 5.0m | FAKRA | Female/Female | С | |
| 710613 | 5.0m | FAKRA | Female/Female | I | |

For more information about this product contact your sales representative or visit > pctel.com/antenna-products

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