



ARENA

aselsan

5078AIR

3.5 GHZ ANTENNA INTEGRATED RADIO

#PublicSafetyCommunication



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3.5 GHZ ANTENNA INTEGRATED RADIO

AReNA 5078AIR (Antenna Integrated Radio) is a radio unit used in 5G networks, specifically referring to active antenna systems where the antenna and radio frequency (RF) components are integrated.

Features

Integrated Systems

- AReNA 5078AIR integrates antenna and RF components into a single system, providing a more compact and efficient design.

Massive MIMO and Beamforming Support

- It supports Massive Multiple Input Multiple Output (MIMO) and beamforming techniques, which direct the signal in specific directions and enable higher data speeds.

Compatibility

- Since AReNA 5078AIR is compliant to O-RAN and 3GPP standards, it can smoothly cooperate with peripheral products.

Higher Performance

- AReNA 5078AIR provides higher data speeds and lower latency, leading to better user experience and increased network capacity.

Enhanced Coverage

- MIMO and beamforming techniques improve signal quality and coverage area, offering better performance, especially in dense urban areas and in case of public events.

Energy Efficiency

- Integrated systems enhance energy efficiency by reducing power consumption. This reduces both operational costs and environmental impact.

Ease of Installation

- The compact and integrated design simplifies installation and maintenance processes, allowing operators to deploy their networks more quickly and efficiently.

Application Areas

- Urban areas: Provides improved coverage and performance in densely populated city regions.
- Dense areas: Delivers high performance in dense areas such as stadiums and public event venues.
- Industrial and enterprise areas: Offers tailored solutions for specific network needs, suitable for industrial automation and IoT applications in wide areas.

Technical Specifications

- Suitable for dense areas, compliant with O-RAN and 3GPP standards
- Designed for 24/7 operation, resistant to relevant environmental conditions
- Supports 64T64R and DL/UL 16/8 layer configurations, enabling high capacity
- 3.4-3.8 GHz support
- TDD support
- 200 MHz IBW (In-Bandwidth) and 200 MHz OBW (Out-of-Bandwidth).
- 64T64R: 64 transceivers/receivers
- 96 dual-pole antennas (192 antenna elements)
- 16-layer MU-MIMO in the DL direction
- 8-layer MU-MIMO in the UL direction
- Supports 2 carriers
- eCPRI support and O-RAN compliance (Option 7-2x separation)

