BSCT GROUP

Massive MIMO Radio

LEAX/CoreNOC/BSCT Group

ABOUT Massive MIMO

The Massive MIMO radio allows operators to get much faster speeds and additional capacity on their existing 2.5GHz 4G spectrum. This Massive MIMO radio is software upgradable to 5G. This gives operators flexibility today to meet customer expectations and a simple path to 5G.

The Massive MIMO radio utilizes near real-time digital beamforming technology, enabling the targeted use of spectrum. Current mobile networks dumbly share a single pool of spectrum out to all users in the vicinity, which results in a performance bottleneck in densely populated areas. With Massive MIMO and beamforming that's handled far more smartly and efficiently, it will improve system capacity and spectral efficiency.

Massive MIMO's ability to serve multiple users – and multiple devices – simultaneously within a condensed area while maintaining fast data rates and consistent performance makes it the perfect fit

HIGHLIGHTS

Extended Coverage

The extended coverage offered by Massive MIMO means operators can avoid site densification that entails costly new base station sites. Massive MIMO Adaptive Antenna with 3D beamforming works with existing 3GPP Release 9 devices on LTE TDD networks – no need to wait for 5G to get the benefits.

3D Beamforming

3D beamforming uses a Massive MIMO antenna to create multiple vertical beam cells and horizontal sharp beam for a distant user, increasing throughput and capacity.

Performance

Massive MIMO is a basic building block of so-called 4.9G, which will bring LTE network performance to near 5G levels.

HIGHLIGHTS

Item	Indices
Bandwidth	194MHz
LTE carriers	3*20MHz
NR carriers	80/100MHz
LTE + NR dual mode	100(NR)+60(LTE)
DL throughput	LTE: 3*320Mbps, NR: 5.4Gbpx
UL throughput	LTE: 3*32Mbps, NR: 650Mbps
Number of connected users	2400
Number of active users	800

BENEFITS

- Can be deployed in today's LTE networks in a Single RAN configuration for TDD and software upgradeable to 5G
- Increased capacity of conventional MIMO
- High spectral efficiency
- Lightweight radios for easy deployment
- Energy efficient reducing operational expense
- Passive cooling means less maintenance

BSCT GROUP

One step ahead

Info@BSCTGroup.com