

# JMA Wireless IOTA 5G 37 GHz In-Building Solution

## Overview

The IOTA Small Cell is industry's first highly integrated, compact form factor 5G-NR base station. It is uniquely optimized for enterprises and venues such as convention centers, airports, and stadiums that can take advantage of massive bandwidths offered by mmWave bands.

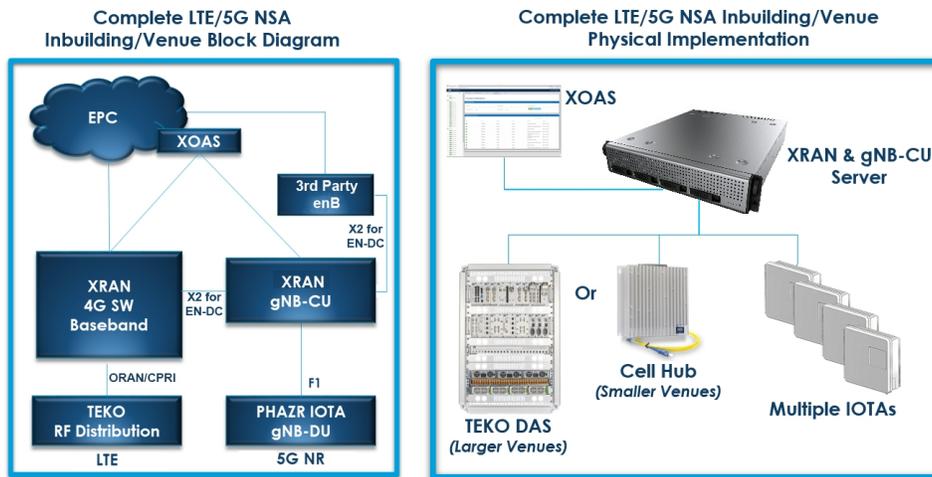
The IOTA Integrated Radio has a modular design to support many 3GPP FR2 bands, including this version, for 37 GHz.

The IOTA Integrated Radio enables multiple deployment options including 5G NSA with JMA's fully-virtualized X-RAN and CellHub or a 3<sup>rd</sup> party eNB.

- 5G NSA and SA support
- 400 MHz 4T/4R for optimized spectrum use
- Open F1 interface – standard IP/Ethernet transport
- Integrated DU, RU, and antenna
- Future-proofed platform supporting 3GPP Rel-15, Rel-16, and beyond
- Fully digital beamforming for superior Non-LOS performance
- Circular polarization for robust mmWave coverage



## LTE+5G NSA In-building/Venue Functional Diagram



Product Specifications (Preliminary)	
Supported technology	5G NR NSA/SA
Functionality	Integrated RU/DU antenna architecture
5G CU Interface	Split Option 2 with open F1 Interface (IP/Ethernet)
Transport Interfaces	1x10 GbE
Transceiver Type	SFP+
Management Interfaces	Netconf protocol and Yang data model
Frequency Band	37.6 - 39.2 GHz (mid n260)
Component carrier bandwidth	100 MHz
Number of component carriers	4
Operating bandwidth	400 MHz
MIMO	2 layers
TX/RX chains	4T/4R
BF method	Digital beamforming
Polarization	Left / Right circular polarization
EIRP	Max 37 dBm per MIMO stream, 40 dBm aggregate
Synchronization	IEEE1588v2
Mounting option	Pole and wall
Physical security	Tamper-proof
Power	-48 VDC using 3-pin terminal block
Dimensions, H x W x D (inches)	13.3 x 13.7 x 5.2 (including front panel and mounting plate)
Weight	25 lb
Operating temperature	-20 °C to +55 °C (-4 °F to +131 °F)
Humidity	5%-85%
Cooling	Passive
Ingress protection	IP66
Tilt	Mechanical, up to 30°; 2.5° increments
Power Consumption	~175 watts