

# **Request for Proposal (RFP) Public Safety DAS BDA System – 700/800 MHz and Motorola MOTOTRBO™ Capacity Plus Digital Radio System – 5 Channel Configuration for Casino Operations**

## **1. Introduction**

The proposed radio system will be furnished and fully installed Bi-Directional Amplifier (BDA) system operating in the 700/800 MHz frequency bands. The system will enhance in-building coverage for emergency responder radio communications in compliance with applicable fire and building codes as well as UHF and UHF part 22 frequencies for the site trunking radio system. The DAS will support 7/800 MHz frequencies for public safety as well as UHF/TDMA and UHF part 22 frequencies for the site trunking radio system. The casino radio system will need to be Motorola MOTOTRBO™ Capacity Plus digital radio system with a minimum of five digital voice channels. The system will support secure, efficient communication across all operational areas of the casino, BOH, 3 parking levels, including gaming floors, surveillance, security, hospitality, and facilities management. Project phased with intro casino opening 2026 and full casino / hotel in 2027.

## **2. Project Scope**

Vendor shall provide all labor, materials, equipment, and services necessary to design, furnish, install, commission, and support a fully functional Comba DAS BDA, and 5 channel UHF Capacity plus trunking system for casino property including:

- Dual-band support for 700 MHz and 800 MHz public safety frequencies
- Coverage for 2.2 million square feet for Two Kings Casino
- Battery Backup Unit (BBU) with minimum 12-hour runtime
- System monitoring and remote alarming capabilities
- Compliance with NFPA 1221, IFC, and UL 2524 standards
- Provide coverage report and readings for county fire marshal
- A complete MOTOTRBO™ Capacity Plus system with 5 digital channels
- All necessary repeaters, subscriber radios, antennas, combiners, and accessories
- Programming, commissioning, and training for casino staff
- Seamless coverage throughout the property, including gaming areas, hotel, restaurants, and parking structures
- Warranty and post-installation support
- Disassemble old radio antenna system and BDA at temporary casino.

BDA DAS ANTENNA: 402/NF-NM/12 TRUECONNECT LOW PIM (-160DBC) SEMI-RIDGE 402

CASINO GROUND: Qty 25.

P1: Qty 24.

P2: Qty 24.

P3: Qty 24.

BOH: Qty 18.

UPPER CASINO: Qty 25.

HOTEL 1 – 24 FLOORS: Qty 63 total.

True Connect - 1/2" Super Flexible Plenum Copper Coaxial Cable; 50 Ohm, White Jacket (conduit provided by General contractor).

RX78V3 COMBA (V3/NG) PUBLIC SAFETY BDA 2 W / FIBER DAS MASTER

Qty:1.

RHFOU FIBER OPTIC UNIT FOR PLATFORM V2F AND V3, 8 PORT, UL2524

Qty: 1.

RH78V3 (V3/NG) PUBLIC SAFETY FIBER REMOTE UNIT DUAL BAND 700+

Qty: 7.

BBUV3-12H (V3/NG) BATTERY BACKUP UNIT.30 AMP-HOUR POWER

Qty: 8.

### 3. Technical Specifications: BDA

Feature	Requirement
Frequency Bands	700 MHz: 758–775 UL / 788–805 DL; 800 MHz: 806–824 UL / 851–869 DL
Output Power	0.5W, 2W, or 5W (based on site requirements)
Gain	Up to 90 dB
Channel Capacity	Up to 64 channels per band (Class A); 96 shared (dual-band)
Filtering	Channelized, software-configurable
AGC / ALC	Fast response; supports P25 Phase 2
Power Supply	110 VAC input; 48 VDC output
Battery Backup	Lithium Iron Phosphate (LiFePO <sub>4</sub> ); 30AH, 60AH, or 100AH options
Monitoring	SNMP, dry contact alarms, GUI interface
Environmental Rating	NEMA 4 or higher

### Technical Specifications: Five channel radio system

Feature	Requirement
System Type	MOTOTRBO™ Capacity Plus (Single Site Digital Trunking)
Channels	Minimum 5 digital channels with 10 digital time slots.
Repeaters	Motorola SLR 5700 series
Data Capability	Text messaging, GPS, job ticketing, emergency alerts
Software Tools	RDAC, CPS, optional dispatch console integration
Coverage Area	Full casino property including gaming floor, hotel, restaurants, and garages
Power Requirements	120 VAC standard; UPS backup recommended
Environmental Rating	Indoor rackmount and weatherproof outdoor enclosures

## **4. Compliance Requirements**

All proposed systems must meet or exceed the following standards:

- NFPA 1221 and/or NFPA 72
- International Fire Code (IFC)
- UL 2524 listing
- FCC Part 90 certification
- Local jurisdiction ERRCS requirements
- FCC Part 90 regulations
- FCC Part 22 regulations
- Motorola ecosystems compatible
- Local gaming commission and public safety standards
- Motorola Solutions deployment best practices

## **5. Deliverables**

- Public Safety BDA 2 W / Fiber DAS Master
- Public Safety Fiber Remote units (Minimum 7 units)
- Battery Backup unit. 30 AMP-Hour power. (minimum 8 units)
- 402/NF-NM/12 True connect tri band antennas
- Commissioning software and GUI access
- Installation and user manuals
- BDA warranty documentation (minimum 2 years)
- As-built drawings and RF coverage heat maps
- MOTOTRBO™ repeaters (minimum 5 units for 10-channel configuration)
- Subscriber radios tailored to department needs
- Antenna system and combiners
- Wave on Cloud Gateway
- Edge Node
- Programming and configuration services
- System documentation and training materials
- Warranty (10-year Mototrbo care Plus)

## **6. Evaluation Criteria**

Proposals will be evaluated based on:

- Technical compliance
- Service shop within 35 miles.
- Heat maps and antenna layout placement.
- Meets all systems and performance specifications
- Vendor experience and references
- Cost and value
- Warranty and support offerings
- Delivery and installation timeline