

# NEW COMM CENTER MICROWAVE – UNION COUNTY

## SYSTEM DESCRIPTION

In a request from Union County, Motorola is providing a quote for microwave to their new communications center. This will be a new microwave path to tie their dispatch into their existing Simulcast network. The proposed microwave path will include redundant hot standby 9500 MPR radios as well as Nokia 7705 SARs on each end of the path. The Microwave path will be between the new Communications Center and the tower at Sheriff\_Wingate. Motorola Solutions complies with all FCC standards and regulations. The pricing for this microwave path is based on the design assumptions listed below.

## PRICING

### New Comm Center Microwave

Equipment	\$ 102,970.00
Services/Installation/Programming	\$ 68,886.00
Total:	\$ 171,856.00
<i>PO by 12/15/2021 Discount</i>	<i>(\$ 20,000.00)</i>
<b>DISCOUNTED TOTAL</b>	<b>\$ 151,856.00</b>

*\*Pricing above is quoted using the H-GAC RA05-18v1 Cooperative Contract*

*Note: The SI Services include engineering, installation, configuration, optimization, project management, Console Training up to 6 Operators and first year warranty / wrap.*

## DESIGN ASSUMPTIONS

- Tower Loading Studies will need to be performed at Sheriff Wingate. Any site/location upgrades or modifications are the responsibility of Union County.
- The design includes redundant (Hot Standby) Microwave Transport option with a 7705 SAR on each end with a Packet Microwave Card for Ethernet connectivity
- Assumes adequate microwave capacity in the existing network to bring the new sites back to the Master Site in Matthews, NC
- Assumes that a viable path exists between the new Comm Center and the Sheriff Wingate Tower (**path survey required**)
- If unforeseen obstructions are discovered during the path survey, the obstructions may be cleared or other path options may be explored, and the costs for this are not included in this quote
- Assumes the T1 to Ethernet conversion project for Union County has been implemented
- Spares are included for Microwave Transport
- The Microwave is configured to transmit data between the Outdoor Unit and the 7705 SAR via Ethernet cabling
  - The maximum distance for Cat5e with PoE is 100m (328ft)
  - Assumes the distance between the Transceiver and the SAR is less than (328 ft.)
  - This quote does not include a shelter at the base of the tower structure to house microwave equipment
- Assumes adequate physical space and power to be provided including UPS and generators

## CUSTOMER RESPONSIBILITIES

- Provide a secure area for all system equipment installation
- Provide an NC licensed electrician for electric services if necessary
- Install eight (8) new Cat 5e cables between network switch & operator positions
- Provide appropriate electrical capacity and number of outlets from emergency power sources

- Provide an adequate grounding system for equipment to be bonded to per R56
- Provide appropriate floor space to accommodate system equipment per Motorola design
- Provide access to sites as needed for system installation