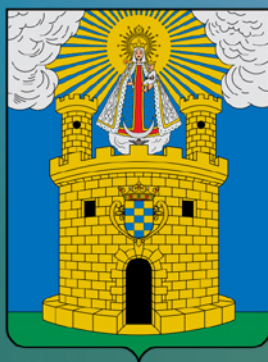


# Case Study

## Union Electrica Enables Wireless Connectivity for Medellin Colombia with L-com's WiMAX Network Solution



### Customer Profile

Customer: Union Electrica  
Location: Medellin Colombia  
Industry: Systems design,  
installation services

### Challenge

- Provide a WiMAX network solution for over 1,200 subscriber points

### Solution

- Off the shelf 3.5 GHz WiMAX Antenna - HG3516D
- Off the shelf coax surge protectors and low loss coax cables

### Results

- Union Electrica was able to provide the city of Medellin with a high speed WiMAX network within budget and on time

### Challenge

Union Electrica specializes in system design, integration and installation services involving the transportation, communications and energy industries. Union Electrica is headquartered in Montevideo Uruguay and serves all of Latin America including Brazil, Argentina, and Colombia.

Union Electrica was awarded a contract with the city of Medellin, Colombia for the deployment of a large metropolitan WiMAX network encompassing over 1,200 subscriber points. The system requirements included support for the 3.5 GHz frequency, all weather operation and focused directional wireless connectivity. Additionally, other connectivity products such as low loss cable assemblies and lightning and surge protectors were also required for the installation.

### Solution

After reviewing the network requirements with Union Electrica, L-com was able to position an off-the-shelf 3.5 GHz dish antenna (HG3516D) along with readily available low loss coaxial cabling and coaxial surge protectors. The HG3516D met all the system requirements with its "Backfire" reflector that is designed to minimize interference and other features including support for either vertical or horizontal polarization, 25° beam-width and compact size which helps minimize wind loading.

Furthermore, L-com provided additional COTS antennas and accessories for this project. Since all the products were off the shelf, no long lead times were incurred and Union Electrica was able to proceed with procuring equipment immediately to meet the aggressive installation schedule.

### Results

L-com was able to meet the technical requirements, pricing targets and product delivery deadlines for Union Electrica's WiMAX network installation bringing the people of Medellin Colombia high speed wireless access for business, education and entertainment.