25 YEARS Winncom Technologies
Premier Global Distribution

BRINGING YOU **EVERYTHING**
BROADBAND AND BEYOND!

Winncom ENGINEERING SERVICES

DAS

WINNCOM HAS SOLUTIONS FOR
PUBLIC SAFETY & INDUSTRIAL DAS
DISTRIBUTED ANTENNA SYSTEMS

In recent decade wireless communications became an infrastructural component that deeply integrates in our lives. Today we rely on their rich capabilities in most of our activities including work, education and entertainment. Realizing that, many real estate management companies and building owners consider bringing cellular communications inside their venues, thus allowing guests, employees and occupants to enjoy the same high quality cellular communication experience as outdoors.

One of the crucial capabilities that wireless communications can also bring to us is providing better safety and security. Indeed, effective communications are mission critical in the events of natural or man-made disasters.

While cellular technologies can be used to report an emergency events and timely notify all the people in a building about them, first responders and security staff rely on specific communications technologies to provide their services. Thus, to leverage full power of wireless technologies in emergency situations, special Public Safety Distributed Antenna Systems that work with these specific systems must be deployed along with Cellular Distributed Antenna Systems.

The importance of public safety wireless service is hard to overestimate, as it really saves lives. So, it is not surprising that new building codes such as International Code Council (ICC) and the National Fire Protection Association (NFPA) that are adopted or soon to be adopted by more than 30 states define strict requirements for in-building first responder wireless service coverage.

Bird The RF Experts · ERICSSON · SOLiD · fiplex · WESTELL

Choose Winncom Technologies as Your Public Safety DAS Partner.

We are here to help you:

- Understand local public safety code requirements
- Choose cost-effective compliant solution
- Design standalone or hybrid DAS solution
- Build rough order of magnitude budgets and Bill of Materials
- Procure all required components
- Plan, install and commission DAS solution
- Monitor, Maintain and Support DAS solution

Cellular & Public Safety DAS

- Site Walks/RF Measurements/CW Testing
- Audits & Inventory, Existing DAS Analysis & Expansion Needs
- Initial Design & Existing Design Review by iBwave Level-3 Certified Engineers
- Heat Map Rendering & Analysis
- Carrier interaction/Vendor Selection/ Cost Analysis/Equipment Supply
- Project Management/Installation/ Integration/Validation/Commissioning
- Optimization/Acceptance
- Monitoring & Notification services/ Maintenance & Repair services/Vendor Interaction

Call 888.WINNCOM or visit www.winncom.com

Multi-Vendor Public Safety and Industrial DAS Design Services

Supporting these brands:

Bird The RF Experts · ERICSSON · SOLiD · fiplex · WESTELL

DESIGN LEVEL 1

INFORMATION REQUIRED

- Required carriers
  - Required PS frequencies
  - Required BDA Class (class A, class B)
  - BBU requirements
- Building address (optional)
- Building blueprints (optional)
- Total square footage and percentage of areas types in the building (open area/cubical/small offices/small rooms)
- RSRP/RSSI readings at potential donor antenna location (optional)
- Signal source type (Small cell/Donor antenna installed outside/Donor antenna installed inside)

OUTCOMES

- General idea on possible equipment layout (optional)
- Rough order of magnitude BOM containing:
  - Vendor parts
  - Major passives

ACCURACY: LOW

Estimate is based on required coverage area, type of environment

TOOLS USED

- Internal ROM tool
- Power Point

FREE

iBWAVE DESIGN CERTIFIED LEVEL 3

iBwave Wi-Fi®

Winncom's Level 3 iBWave Certified Engineers are capable of designing DAS & Wi-Fi projects of any complexity

DESIGN LEVEL 3

INFORMATION REQUIRED

- Required carriers
  - Required PS frequencies
  - Required BDA Class (class A, class B)
  - BBU requirements
- Building address
- Building blueprints with:
  - Scale
  - Indication of required coverage areas
  - Potential donor antenna/small cell location
  - Potential Network Units installation location(s)
- RSRP/RSSI readings at donor antenna location (on roof and/or in the room)
- Preferred paths of cable runs for coax (donor antenna-to-NU), and CAT5 (NU to CUs)
- Floor height
- Walls materials and thickness
- Signal source type (Small cell/Donor antenna installed outside/Donor antenna installed inside)
- RF and CAT5/6 cable requirements (Plenum, fire retardant or regular)

OUTCOMES

- Heatmaps
- Cable routing report
- System design
- Preliminary bill of materials with all major components needed

ACCURACY: HIGH

Estimate is based on full iBwave system design with propagation studies

TOOLS USED

- iBwave Design (building design/system design/ signal propagation/cable routing)
- Power Point

Price: $2500–7000*

depending on the coverage area

** Half the cost is credited back in equipment quote*

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