

DIGITAL ELECTRICITY™ APPLICATION NOTE

4G & 5G ROOFTOP MACRO

THE SCENARIO

Planning new sites on rooftops can involve structural loading calculations and could restrict the availability of suitable locations. Upgrades of existing tower and rooftop sites by adding more and more equipment due to new operators or technology/frequency additions. Existing sites are the most suitable due to an existing backhaul connection.

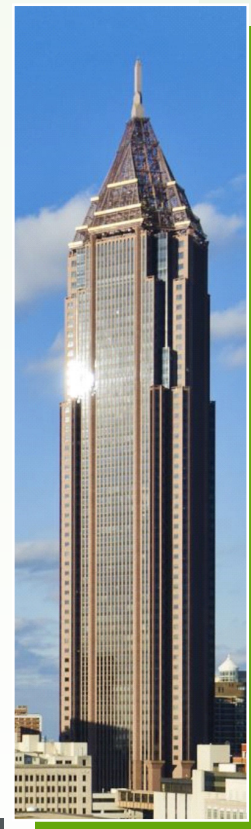
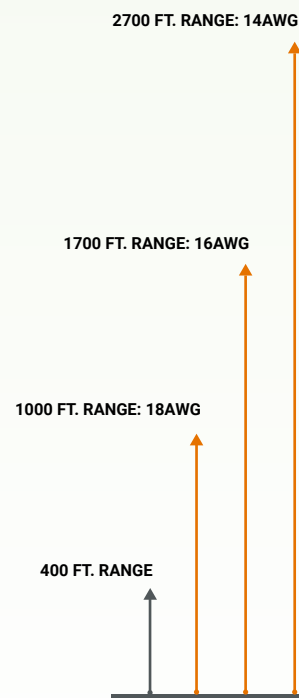
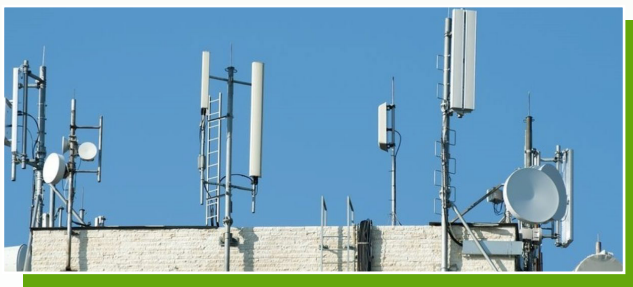


THE CHALLENGE

Structural loading calculations require specialist 3rd parties to produce the calculations and then require approval from the building owner that can delay the deployment. Additional power surveys will be required to meet the new site demand and negotiating with the existing supplier may also delay the deployment. There may not be sufficient capacity local to the equipment resulting in a new infrastructure being deployed.

WHY VOLTSERVER?

- **Cost:** Same pathways for fiber and power reduces the number of contractors involved.
- **Speed:** Power can be obtained from an existing source within the building and be routed up to the roof therefore negating the need for additional AC main supplies on the roof.
- **Scalability:** Digital Electricity can be provisioned for future upgrades with its modular platform.



WHAT IS DIGITAL ELECTRICITY™ ?



Conventional Electricity



DE Transmitter

Structured Cable



DE Receiver



IoT switch

ENERGY PACKET



Discrete “packets” of electricity.
Each checked for safe transfer from transmitter to receiver.
500 safety checks per second.

SOLUTION 5S's:

- Significant Power: 600W/pair
- Significant Distance: 2km
- Skinny Conductors: 18-16AWG
- Speed to Deploy
- Safely



DELIVERING POWER:

- Where it is needed
- In the format it is needed
- With lower cost & higher resiliency

VoltServer is the leading provider of intelligent, premise-based power distribution solutions leveraging Digital Electricity™ from centralized source to distributed endpoint loads to improve the customer's essential business applications.

Patented and proven **Digital Electricity™** solutions deliver cost-effective, high-reliability power where and when you need.

Digital Electricity™ is a trademark of VoltServer, Inc.