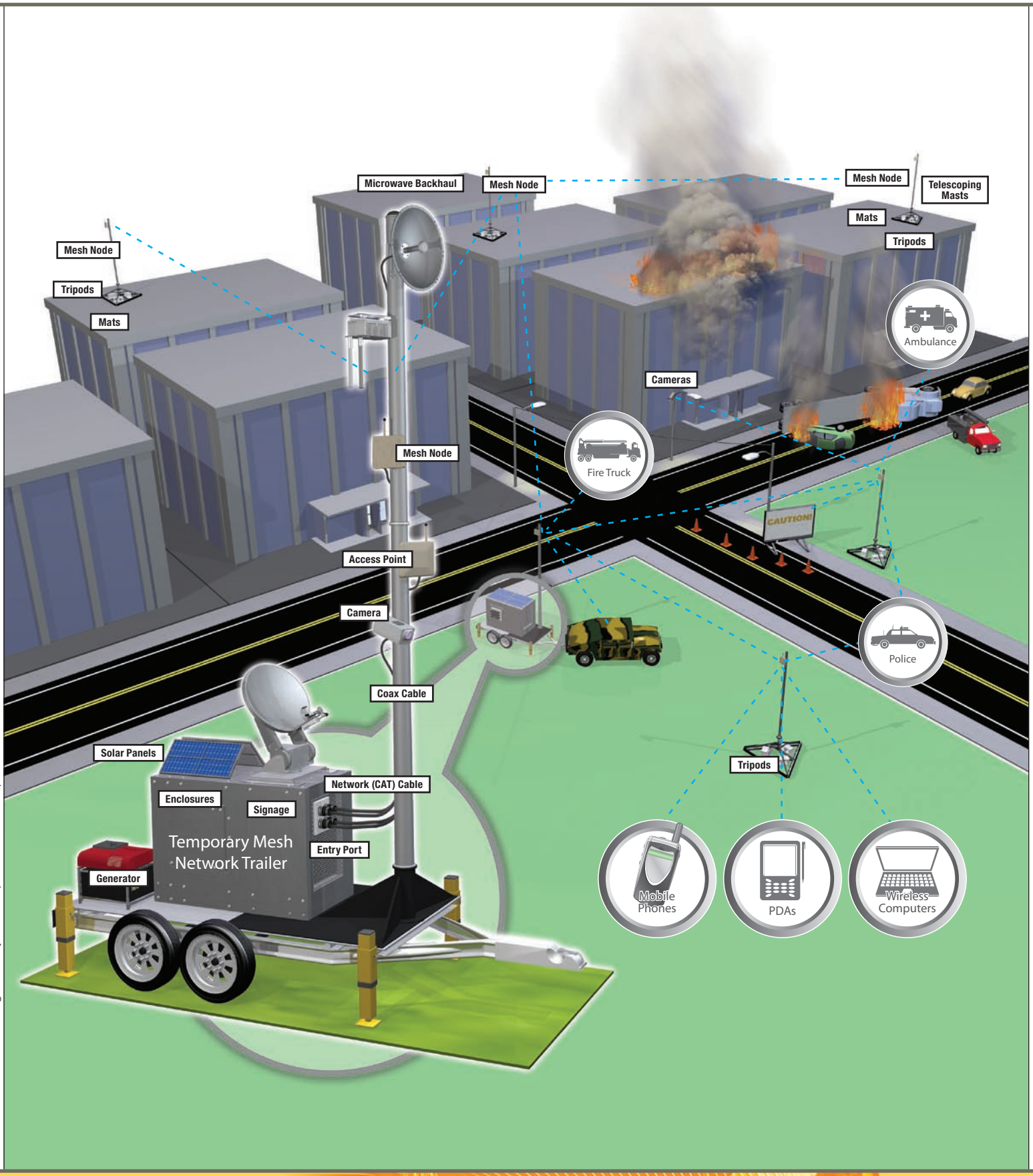
TESSCO

Solution: City & Campus Networks

Application: Disaster Recovery



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SUMMARY

Voice, video and data connectivity is vital for restoring normal operations to any enterprise or municipality in the event of a natural or man-made disaster. Loss of communications, loss of power, and damaged infrastructure are all problems that must be addressed in the face of an emergency. Proper disaster recovery solutions are redundant or temporary systems that restore these critical network functions. They must be deployed quickly and with little or no support.

FEATURES

- Speeds ranging from 512 Kbps to 1.25 Gbps
- Distances ranging from a few meters to 90 miles
- Integrated and/or external antennas
- Licensed spectrum from 4.9 GHz to 80 GHz
- Unlicensed spectrum of 900 MHz, 2.4 GHz, 5 GHz, 24 GHz, and 60 GHz.
- Line-of-sight (LOS), near line-of-sight (NearLOS) and non-line-of-sight (NLOS) options
- RF radios, free space optics and millimeter wave
- Terrestrial or satellite backhaul for connectivity anywhere
- Transportable temporary-mounting infrastructure
- Backup and solar power

BENEFITS

- Quick deployment time
- Portability
- Scalability
- Versatile network connections
- Carrier-grade reliability
- Economical
- Data and voice connectivity anywhere via TESSCO's satellite uplink solution

REAL WORLD EXAMPLES

Situation: A hurricane struck a coastal region.

Problem: Power and communications were interrupted over a wide area, leaving cell phone users and emergency responders without wireless communications, hampering rescue efforts.

Solution: Cellular carriers and emergency response organizations deployed Cellular On Wheels (COW) units to establish cell phone coverage. Telescoping masts were erected to provide temporary mounting for public safety antennas, ensuring steady communication for rescue agencies. Generators provided power for communications equipment. Data links were restored using unlicensed spectrum radios and satellite backhaul.

Situation: A major electrical failure occurred, causing a blackout in a major city in the northeast U.S.

Problem: The sudden loss of electricity threatened to shut down computers and cause large amounts of data loss in a major enterprise.

Solution: This business had uninterruptible power supplies (UPS) installed, so they did not suffer lost data—the backup time allowed critical information to be saved before shutdown. The backup power also allowed the business to maintain its data links with areas that were unaffected by the blackout, so that the other end of the links were aware of the situation.

ADDITIONAL CONSIDERATIONS

- What are the anticipated power requirements and run times?
- What are the link distances?
- What are the bandwidth requirements?
- What are the path characteristics—LOS, NearLOS, NLOS?
- What are the security requirements?
- What are the antenna placements?
- What are the environmental characteristics?
- What are the other critical concerns: grounding and lightning protection, network interface requirements, Fresnel zone clearance?

PRODUCTS

- Cable and connectors
- Grounding and lightning arrestors
- Antennas
- Mounting hardware
- Cameras
- Enclosures
- Power solutions
- Test equipment
- Tools
- Network routers and switches