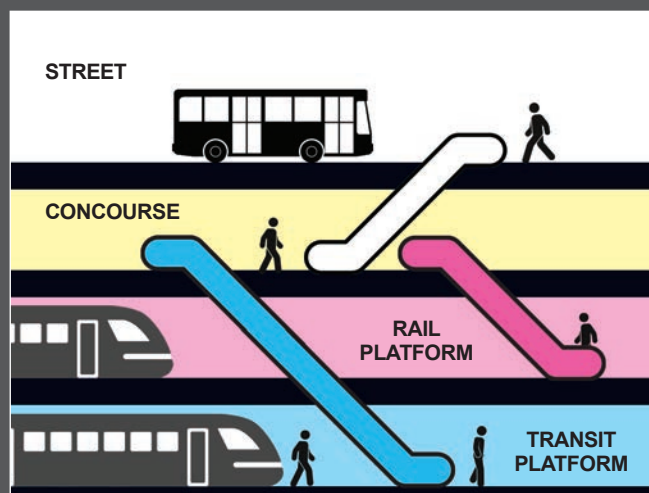


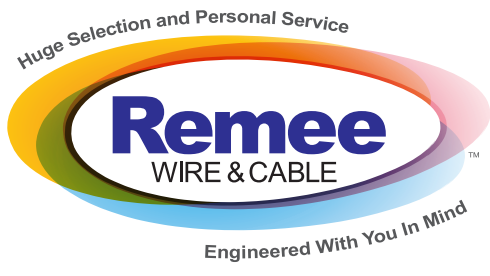
## Case Study

### Remeo, Mobilitie and VoltServer Provide Digital Electricity\* Solution for Large Metro Rail Transit System



Remeo Wire & Cable, Mobilitie and VoltServer provided a Digital Electricity\* solution for a large municipal transportation agency. VoltServer, the developer of Digital Electricity™ (DE) technology, provided its equipment to power the DAS Radios for the metropolitan rail system to Mobilitie, the 3rd party operator and owner of the system

infrastructure, who also installed the equipment. Remeo Wire & Cable was selected by Mobilitie to provide its PowerPipe™ cabling solution for this installation, which was designed and approved for use with VoltServer's DE equipment.



## Case Study



VoltServer's DAS equipment in tunnel using Remeë's rugged PowerPipe™ cable.



VoltServer equipment installed in stations.

### THE PROBLEM:

The control equipment for the rail system needed the capability to carry thousands of watts of power over thousands of feet to power the radios installed throughout the system. The installation would involve the transmission of data and power from equipment-stations throughout the tunnels of these transit systems.

*Remeë's fault-managed "PowerPipe"™ cabling solution for safe power distribution is part of the Activate™ by Remeë line of Powered Cable Solutions.*



### THE SOLUTION:

VoltServer's patented Digital Electricity™ system was selected by Mobilitie for this project. VoltServer invented DE, a patented methodology, for the safe transmission of power up to 2km. This innovative technology offers the power and distance capabilities of traditional AC distribution but with the safety characteristics inherent with low voltage power distribution. It delivers significantly more power and at greater distances than PoE or Class 2 infrastructure while using the same low-voltage wiring practices and pathways. It was the perfect solution for powering the DAS radios throughout the tunnel system.

Mobilitie was chosen as a third party operator to install, own and operate the DAS and fiber infrastructure needed. With its experience working in tunnels, such as with Seattle Sound Transit, Mobilitie was the ideal organization for this transit project. The company works with carriers, such as Verizon, T-Mobile and AT&T, to provide their service over the DE infrastructure.

Remeë Wire & Cable, as an approved cable manufacturer for use with VoltServer's DE system, was one of the available supplier options to provide cabling for the rail project. Remeë was chosen

*“Mobilitie required a solution that met the needs of a transit deployment. Remeë worked with Mobilitie and consulted with VoltServer to ensure their solutions met the requirements for DE. We're happy to have them as an approved supplier for DE solutions.”*

*- Ken Hydzik, P.E.  
VoltServer*

“The most important criterion for the selection of Remeo as the cable supplier was their ability and experience in meeting NFPA 130 certification and their understanding of tunnel requirements. And as we worked with Remeo, we also found them willing to go above and beyond to see our project through successfully.”

- Jordan Bahr,  
Senior Director, Network Deployment  
Mobilitie

by Mobilitie because of the company’s ability to meet NFPA 130 requirements for jacketing in a tunnel environment. Remeo had already been working on similar NFPA 130 cabling solutions for its customers and had the expertise and capability to provide the same certification for this project. Remeo was selected to provide its PowerPipe™ cable for the DE applications, running cable from the various stations to remote locations along the tunnels. Not only was Remeo able to meet Mobilitie’s critical timelines, but they went above and beyond typical requirements for a project like this.

Remeo provided its PowerPipe™ wet location cables in 16 AWG and 18 AWG multipair constructions to support VoltServer’s DE technology and deliver low voltage power to distant locations and dense spaces.



### Why Remeo?

In addition to having experience providing NFPA 130 certified cabling solutions for tunnel environments, Remeo provided other capabilities and services as well, particularly for cabling in harsh environments.

- Resilient jacketing options, including Low Smoke Zero Halogen (LSZH)
- Compliant with NEC Class 4 Fault-Managed Power requirements
- Engineering and manufacturing experience with a variety of PoE and other extended distance data and power cabling solutions. Remeo’s line of Activate™ Power Distribution Cables is the foundation for their PowerPipe™ Digital Electricity solution.
- Strong capabilities to provide water blocking features for installation in wet locations
- Copper and fiber optic cable constructions, including hybrids, composite, and bundled cables
- Shielding configurations, as needed
- Cables resistant to sunlight, oil and chemicals, temperature extremes and abrasion
- Remeo cables are manufactured in the U.S. under ISO 9001 certification
- Strong customer service capabilities for personal attention by family run company

### The Benefits of VoltServer Digital Electricity™

Digital Electricity™ allows for controlled power distribution that is safe, less expensive, faster to install, and meets the needs for an increasingly digital world. It’s a line powering system which provides a means of energizing remote equipment from a centralized location over copper cable.

Huge Selection and Personal Service

**Remee**  
WIRE & CABLE

Engineered With You In Mind

DIGITAL ELECTRICITY CABLES FOR METRO RAIL TRANSIT SYSTEM

## Case Study



DE offers the convenience and safety of low-voltage distribution architectures such as Power over Ethernet (PoE), with the power and distance capabilities of traditional AC distribution.

VoltServer's DE solution allows for unparalleled construction, performance, and safety advantages over traditional power distribution architectures.

### Fault Management & Inherent Safety

Safe power transmission is inherent in the VoltServer architecture as the power transmission is continuously monitored. If there is a fault such as improper wiring, a short circuit, or a person is touching the transmission lines, the VoltServer system recognizes the condition in milliseconds and halts the transmission of power. The result is "touch safe" electrical transmission at high power levels and an inherent ability to digitally control a host of modern electronic devices connected to the distribution system.

### About VoltServer

VoltServer is a venture-backed technology leader reinventing how electrical energy is distributed. The company is the leading provider of intelligent, premise-based power distribution solutions leveraging DE from centralized source to distributed endpoint loads to improve customer's essential business applications. Award-winning VoltServer began its operations 10 years ago and has established headquarters in East Greenwich, Rhode Island.

### About Mobilitie

Mobilitie, a BAI Communications company, is a leading telecommunications infrastructure company in the U.S., headquartered in Newport Beach, CA. The company's industry-leading end-to-end solutions offer customers an efficient and cost-effective path to network leadership, and the connectivity they need to advance their services, accelerate their networks, and amplify their reach.

### Remee's Activate™ PowerPipe™ Distribution Cables

- Multipair Cables – 18, 16 and 14 AWG, unshielded, in Plenum, Riser and Direct Burial versions
- Multipair Cables – 18 and 16 AWG, unshielded, wet location, LSZH insulation & jacket
- Multipair Cables – 18 and 16 AWG, overall shielded, Direct Burial
- Micro Fiber Distribution Hybrid Cables – 18 and 16 AWG, SM OS2, FR-PVC jacket
- Hybrid Cables – 18, 16 and 14 AWG, SM OS2, CMP/OFNP with Remguard™ jacket, CMR/OFNR with FR-PVC jacket
- Hybrid Cables – 16 AWG, SM OS2, wet location, LSZH insulation & jacket

For more information about Remee Wire & Cable, please visit [www.remee.com](http://www.remee.com), email us at [info@remee.com](mailto:info@remee.com), or call **1-800-431-3864**.

**Remee Wire & Cable**  
1751 State Rte 17A, Suite 1  
Florida, New York 10921

**Phone: 800.431.3864**  
Fax: 845.651.4160  
Email: [info@remee.com](mailto:info@remee.com)

[www.remee.com](http://www.remee.com)



© Copyright 2022, Remee Products Corporation,  
Florida NY, dba Remee Wire & Cable