Powering Smarter Roadway Infrastructure with Digital Electricity™



Increased vehicle usage, the need for increased security and telemetry, rising accident rates, and heightened traveler expectations are driving the demand for connected roadways. They offer safer, smarter, and more sustainable transportation. Remote power is the only way to keep critical roadway infrastructure running, especially in isolated and hard-to-access locations. VoltServer's Fault Managed Power Systems support fast remote-power deployment in smart roads, tunnels, and bridges across North America. Our patented Digital Electricity solutions enable power and fiber deployment in a single pathway for **rapid, unfailing connectivity in advanced transportation infrastructure**.



Traffic Management Systems: Cameras, sensors, digital signage, and pedestrian signals remain operational from any location with remote power. Thanks to the continuous connectivity it provides, these systems can monitor and manage traffic flow across roadways, tunnels, and bridges.



Environmental Monitoring Systems: Remote-powered sensors embedded into roadways and infrastructure can track and transmit weather conditions and surface status to enable safety alerts and update transportation authorities and traffic control.



Roadside Emergency Communication Systems:

When emergency communication systems are supported by remote power, they can notify drivers and connected vehicles about hazards, closures, and accidents, as well as communicate with authorities to ensure fast coordination and response.



Tolling Systems: Instead of extending traditional grid infrastructure, automated toll collection stations can rely on remote power for cashless and contactless toll collection.



Smart Lighting: Responsive streetlights that modify brightness in response to traffic and weather require remote power to maintain consistent operations and adapt based on real-time conditions.



Smart Parking Systems: To make trips faster and easier, remote power connects the sensors and cameras used in smart parking systems that help drivers find open spots.

Learn more about our Digital Electricity solutions at voltserver.com