

# Build energy-efficient, net-zero streetlight networks



- Reduce municipal street lighting costs up to 70 percent using smart controls
- Each solar generator powers four streetlights
- A network of 10,000 poles eliminates 7 million pounds of carbon emissions a year, the equivalent of taking 790 vehicles off the road.

## The Petra Smart Solar Power Generator

Power for streetlights is often the largest part of a city's power bill. Adding pole-mounted solar can further extend the value of an LED streetlight retrofit. The Petra Smart Solar Power Generator can help create a net-zero energy streetlight network.

The Petra Intelligent Power Generator includes a high-efficiency solar energy system composed of a PV solar panel, a SunWave™ Inverter, and fully integrated racking and cabling for simplified and secure pole attachment. The Generator communicates with the communications bridge through the AC line by means of a Power Line Communications protocol or PLC, which then connects to the wireless backhaul through a WiFi connection. Managers can view all system data through Petra's IntelliView® Smart Energy Platform for panel level performance intelligence to obtain complete visibility, management and control over the entire distributed solar power plant.

### SAFETY

The system is inherently safe with no high voltage DC currents, and automatic shut-off per PV module

### PERFORMANCE

Maximize the performance per PV module

### RELIABILITY

No single-point of failure

### DIAGNOSTICS

Monitoring, reporting, and control at the PV module level

### ADAPTABILITY

Highly flexible and scalable architecture