

PRODUCT DATA SHEET

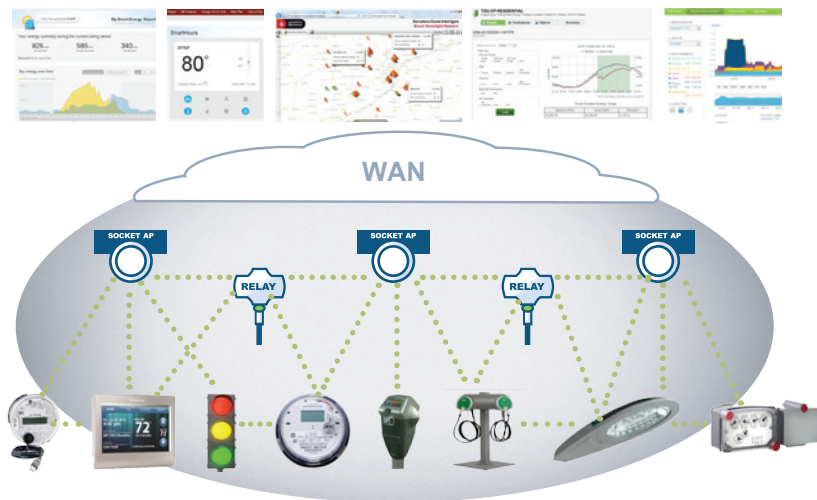
SILVER SPRING Gen5 NETWORK

SocketAP 5

Leading utilities and cities have delivered breakthroughs in operational efficiency, customer service and environmental sustainability by relying on Silver Spring's secure, reliable two-way connectivity to critical infrastructure. The Silver Spring Gen™5 network technology delivers the performance to continue the acceleration of critical infrastructure modernization initiatives. The SocketAP 5 offers secure, flexible connectivity between the Silver Spring network and cellular networks.

Flexible Communications for Diverse Applications and Environments

The Silver Spring SocketAP 5 provides the central network resource for delivering data generated by endpoint devices at the network edge and IT/OT systems—enabling high performance applications, network control and monitoring. Its flexible communication features extend the reach and coverage of the network to hundreds of customer sites, and its support for up to 250 endpoints per SocketAP 5 dramatically lowers costs. The SocketAP 5 offers multiple paths to each endpoint device through sophisticated mesh network routing that ensures greater reliability and redundancy.



The high-performance SocketAP 5 dynamically adapts to optimize reach and coverage to a variety of devices while securely and reliably delivering data for multiple applications.

The low latency and high-speed throughput of the SocketAP 5 keeps pace with the high-performance devices and network infrastructure within the Silver Spring network. Redundancy, secure communications and high reliability enable utilities to scale multi-application deployments rapidly while leveraging existing systems and reducing overall cost of ownership.

FEATURES

Secure, reliable performance to enable the most demanding smart infrastructure applications

- » Up to 2.4 Mbps data speeds
- » As low as 10 ms latency
- » Open standards-based two-way communications and interfaces
- » IPv6; IEEE 802.15.4g, Wi-SUN compliant
- » 4G LTE cellular backhaul
- » Dynamically adaptive data rates to ensure maximum performance while ensuring backwards compatibility
- » Integrated, open standards-based security
- » Public key-based authentication and AES-256 encryption
- » Increased system performance and data throughput
- » 900 MHz and 2.4 GHz radios
- » 32 MB RAM and 32 MB flash

Key Benefits

The SocketAP 5 couples secure, reliable performance with open standards-based IPv6 communications to enable utilities to cost effectively integrate mission-critical control and monitoring processes.

Expanded opportunity for performance-intensive multi-application services

The SocketAP 5's support for a data rate up to 2.4 Mbps and as low as 10 ms latency enables utilities to roll out new types of services and increase customer satisfaction with engaging applications. Gen5 also includes a dual-band mesh capability that nearly doubles network capacity as devices can transmit and receive on the 900 MHz and 2.4 GHz bands simultaneously.

Rapid time-to-value with flexible deployment

The SocketAP 5 can be deployed on a broad array of existing assets. It can be ordered in forms that support ringed or ringless meter sockets. It can support the 2S, 12S, 16S, 9S, or 36S meter form. Multiple external antenna options are available to further extend the SocketAP 5's range and coverage levels.

Comprehensive and cost-effective coverage of diverse territory

The SocketAP 5 delivers cost-effective coverage while ensuring maximum overall system performance by dynamically adapting the data rate to optimize reliable information delivery over a long range in the most challenging environments.

Risk mitigation through proven, multi-layer security

Two-way communications remains protected from the increasingly hostile threat environment by building on Silver Spring's proven, multi-layer security that leverages built-in controls from the application to device layer.



The SocketAP 5 delivers low latency and high data rates for the most demanding multi-application initiatives.

About Silver Spring Networks

Silver Spring Networks is a leading networking platform and solutions provider for smart energy networks. Silver Spring's pioneering IPv6 networking platform, with over 22 million Silver Spring enabled devices delivered, is connecting utilities to homes and businesses throughout the world with the goal of achieving greater energy efficiency for the planet. Silver Spring's innovative solutions enable utilities to gain operational efficiencies, improve grid reliability, and empower consumers to monitor and manage energy consumption. Silver Spring Networks' customers include major utilities around the globe such as Baltimore Gas & Electric, CitiPower & Powercor, Commonwealth Edison, CPS Energy, Florida Power & Light, Jemena Electricity Networks Limited, Pacific Gas & Electric, Pepco Holdings, Progress Energy, and Singapore Power, among others. For more information please visit www.silverspringnet.com. Rev. 1/27/2016

Specifications:

Communications	Data rate: 6.25 kbps to 2.4 Mbps Frequency: 902-928 MHz and 2.4000-2.4835 GHz (USA) Spread spectrum technology: FHSS Modulation: FSK, O-QPSK, or OFDM — adaptive gear shifting Transmitter output: 900 MHz-30 dBm (1W) 2.4 GHz— +27 dBm (500 mW) Output impedance: 50 ohms WAN— Cellular- 4G LTE
Protocols/Security	Addressing: Internet Protocol version 6 (IPv6) Security: Secure Hash Algorithm 256 bit (SHA-256) and RSA-1024 or ECC-256 Encryption: Advanced Encryption Standard (AES-128 or AES-256)
Physical Interfaces	1 mesh antenna connector SMA, Female 1 cell antenna connector SMA, Female
Power	Power Input range: 96 to 277 VAC, 50 to 60 Hz
Environmental	Operating temperature: -30°C to +70°C (-22°F to +158°F) Humidity: 0% to 95%, non-condensing
Mechanical	Dimensions: 9.6" x 4.8" x 8.4" (LxWxH) Weight: 4 lbs, 9 oz
Meter forms supported	Ringed or Ringless 2S, 12S, 16S, 9S, or 36S This product is designed for ANSI Meter sockets and is intended for the North America market
Battery Backup	Built-in battery with 15-year life provides 10 minutes of backup power

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