Siemon’s PowerGUARD™ Technology Delivers Superior Support for Remote Powering Applications

September 4, 2019. Watertown, CT - Siemon, a leading global network infrastructure specialist, today announced the launch of its new PowerGUARD brand. Aligning the company’s established copper cable and connectivity systems that feature innovative technology specifically designed to provide superior support for remote powering applications such as Power over Ethernet (PoE) and Power over HDBaseT (PoH), PowerGUARD enhancements are engineered into Siemon’s outlets, plugs, cables and patch cords to ensure a robust and reliable end-to-end system that guards against the impact of delivering DC power to IP-based devices over the low-voltage IT infrastructure.

Remote powering technology, like PoE and PoH, transmits DC power along with data over copper twisted-pair cabling systems to end devices and significantly impacts network infrastructure deployments, enabling faster installation and reducing cost by eliminating the need for an AC power run. With availability of IEEE 802.3bt 60W Type 3 and 90W Type4 PoE for networked devices and 100W PoH for HDBaseT AV devices, remote powering levels have advanced to power everything from wireless access points, advanced pan-tilt-zoom surveillance cameras, access control devices and LED lights, to video displays, digital signage, point of sale machines and even desktop computers.

“With today’s higher levels of remote powering comes the potential for heat buildup within cable bundles and electrical arcing damage to connector contacts,” explains Valerie Maguire, distinguished engineer with Siemon. “This can lead to power and efficiency losses, performance degradation and reduced connecting hardware reliability and has resulted in more stringent bundling requirements and the need de-rate the length of network links to maintain performance – all of which limits flexibility when designing and installing networks.”

Siemon’s PowerGUARD technology includes patented crowned contacts on the company’s Z-MAX®, MAX® and TERA® outlets that place the arcing damage caused by unmating connections while transmitting power away from the final mated position to ensure the integrity of contact seating surfaces and maintain long-term reliability. To combat the effects of heat build-up in cable bundles carrying DC power that can cause increased signal attenuation and premature aging of jacketing materials, Siemon’s Category 6A and 7A cables with PowerGUARD technology are qualified for mechanical reliability in high temperature environments up to 75° C. This ensures superior heat dissipation and extremely stable transmission performance, preventing the need to reduce link length and cable bundle size.

For networks that utilize modular plug terminated links where devices connect directly to the network via an RJ-45 plug, Siemon’s Z-PLUG® Category 6A field-terminated plug with PowerGUARD technology features a fully-shielded 360-degree enclosure and 75°C operating temperature, providing superior heat dissipation in conjunction with Siemon PowerGUARD cables. For traditional network deployments that utilize patch cords for connecting devices to outlets, Siemon’s Z-MAX Category 6A and TERA Category 7A...
four-pair shielded solid modular cords with PowerGUARD technology also offer a 75°C operating 
temperature, reducing the potential for degraded transmission performance at elevated temperatures 
and making them ideal for use in spaces that do not have environmental control (e.g., ceilings and 
warehouses). For use within environmentally controlled spaces, such as active equipment and cross-
connect connections within telecommunications spaces, Siemon Category 6A shielded stranded modular 
cords with PowerGUARD technology are also qualified to 75°C, while offering a smaller diameter and 
greater flexibility for use within patching fields.

To learn more about PowerGUARD technology and how it can help protect your low-voltage 
infrastructure from the impacts of remote powering, visit: go.siemon.com/powerguard

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About Siemon
Established in 1903, Siemon is an industry leader specializing in the design and manufacture of high 
quality, high performance IT infrastructure solutions and services for Data Centers, LANs and Intelligent 
Buildings. Headquartered in Connecticut, USA, with global sales, technical and logistics expertise 
spanning 100 countries, Siemon offers the most comprehensive suites of copper and optical fiber 
cabling systems, cabinets, racks, cable management, data center power and cooling systems and 
Intelligent Infrastructure Management solutions. With more than 400 patents specific to structured 
cabling, Siemon Labs invests heavily in R&D and the development of Industry Standards, underlining the 
company's long-standing commitment to its customers and the industry. Through an ongoing 
commitment to waste and energy reduction, Siemon's environmental sustainability benchmarks are 
unparalleled in the industry, including 179% global carbon negativity and zero-landfill status

Siemon Interconnect Solutions (SIS) is a Siemon business unit comprised of a team of dedicated 
technical sales professionals supported by Siemon Labs, mechanical, electrical and signal integrity 
gineers committed to solving industry and customer driven interconnect challenges. We provide 
custom network infrastructure solutions to: OEM's, Leading Manufacturers, Value-Added Resellers and 
System Integrators.