

Power over Ethernet (PoE) Switch Adds Advanced Network and Security Features for Outdoor Applications

Microchip's PDS-204GCO, the next-generation solution of the popular PDS-104GO, also offers easy installation and environmental protection

CHANDLER, Ariz., Mar. 1, 2023 —PoE switches designed for outdoor use in smart buildings and cities enable services ranging from public Wi-Fi® and video surveillance to connected streetlights that increasingly need better reliability and cybersecurity protection. Extending the industry's family of PoE switches with the high industry-standard outdoor protection for these applications, Microchip Technology Inc. (**Nasdaq: MCHP**) today announces its **PDS-204GCO** switch that adds increased cyber protection plus the redundancy required for high network availability in mission-critical applications with long-distance connectivity.

"Like our PDS-104GO switch, the PDS-204GCO complies with the high outdoor industry-standards, and is designed for easy and safe installation," said Iris Shuker, director of Microchip's PoE business unit. "It also takes the next step to better support applications in which massive amounts of critical data are collected from widely dispersed PoE-powered edge IoT devices. It addresses these dual challenges of network security and network availability all the way from the endpoint to the central management system."

PoE technology enables power to be delivered over standard Ethernet infrastructure for quick and easy installation of edge IoT end points. Outdoor PoE switches connect these devices to the network and power them under a broad range of environmental conditions while monitoring and controlling status, including remote reset. Microchip's PDS-104GO switch is the first to support the industry's high Ingress Protection 67 (IP67) waterproof rating in these applications while eliminating the need to open the unit during installation and jeopardize safety, performance or reliability. The PDS-204GCO switch takes the next step, adding cybersecurity features for Ethernet networks to protect applications against threats at all network levels, and redundancy features that enable high network availability.

The PDS-204GCO includes four PoE Gigabit Ethernet ports that support the IEEE 802.3bt (Type-4) standard and two Small Form-Factor Pluggable (SFP) fiber links that each support 1 Gigabit per second (Gbps) or 2.5 Gbps speeds. The fiber links can be used as optical uplink ports for surveillance cameras and as a redundant uplink path for increasing network availability. Support for ITU-T G.8032 Ethernet Ring Protection Switching (ERPS) technology ensures communication continues if there is an uplink link failure. The PDS-204GCO switches also supports multiple network topologies, and multiple units can be concatenated using a daisy-chain topology to extend the reach from the main central switches while reducing the number of optical cables directly connected to it from each device.

The PDS-204GCO's cybersecurity features protect both the data traffic transmitted within the switch and the switch's system management. Key features for protecting transmitted data within the switch include endpoint device authentication and authorization, manual switch-traffic policy management, and Denial-of-Service (DoS) attack prevention. Key features for protecting switch management and configuration include securing web browsing using self-signed or Certificate

Authority (CA)-signed certifications and user authentication and authorization by remote servers using RADIUS or TACACS+ security mechanisms.

The PDS-204GCO outdoor PoE switch is based on Microchip's VSC7514 10-port industrial Ethernet switch, VCS6817 IStax software package and PoE integrated circuits.

About Microchip Technology

Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 120,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.