Deploying integrated solutions optimized for video surveillance and access control

**LOCATION:** APAC Region - Australia  
**PRODUCTS:** Z-PLUG™ Field Terminated RJ-45 Plug  
**APPLICATIONS:** IP-based security surveillance using Axis Security Cameras and Z-PLUG™

**OVERVIEW:**

IoT is made up of many devices, from sensors and smart phones to physical access control devices and of course IP-based network cameras - they all have one thing in common, they are connected together using cabling. So what does it mean when it comes to connecting these devices and other applications, where virtually every device is connected to network cabling?

A quality connection from network to device is an absolute requirement.

Thanks to advances in Power over Ethernet (PoE) technology, a power outlet is now no longer required for many security devices. A network camera is now generally powered by an Ethernet switch and not by a locally installed mains voltage outlet. Rather than connecting to the network via outlets and patch cords, these devices can also now be connected directly using a modular plug-terminated link (MPTL) topology using field-terminated plugs. The use of zone cabling with MPTL topology enables rapid deployment of shorter, easy-to-manage connections from zone enclosures directly to devices.
Terminating directly at the device with an RJ-45 plug did occur in the past but it was very difficult to consistently repeat. The RJ-45 plug was designed to be terminated on a bench in a factory using a crimping press, not at the top of a ladder when mounting a networked camera!

As a result, replicating the performance of factory terminated plugs has been a barrier to having technicians terminate in the field, however Siemon has overcome these challenges with the new Z-PLUG™ field terminated RJ-45 plug.

Offering a fast and consistent termination process, the user friendly tool ensures best-in-class termination time and consistent, repeatable performance. The Z-PLUG is designed to work in tight spaces such as network cameras and wireless access points, and the boot and latch protector can be eliminated or shortened for extreme clearance environments.

The Z-PLUG is the only plug in the market that can be terminated on all cable types, shielded and unshielded, stranded and solid cable types from Category 5e to Category 7A. It also exceeds all Category 6A performance requirements, supporting 10G system transmission for high-speed applications like 802.11ac Wi-Fi and higher level PoE delivery, which is also recommend to use of shielded Category 6A.

With the right field terminated plug solution in place, the straight-to-the-point approach of plug terminated link technology combined with zone cabling can create a significant advantage for IP end-device connectivity and increase the speed of deployment of a networked camera installation.

The technology is established, the devices exist, and the volume of network cables needed to support this trend is increasing.

Why should you consider using the Siemon Z-PLUG on a network security camera installation?

• Improved security by eliminating patch cords that can be easily disconnected from devices like surveillance cameras. These could be easily pulled out which is a concern in public spaces like schools, hospitals, airports, etc.

• Using Z-PLUG for a modular plug terminated link provides a cost saving vs a link using outlets and patch cords.

• Rapid deployment of IP devices via custom-length quick connections.

• Improved performance and more efficient power delivery by eliminating extra connection points introduced by outlets and patch cords.

Now featuring PowerGUARD Technology, Siemon’s Z-PLUG FieldTerminated Plug offers an innovative approach to connecting IP-enabled IoT and smart building devices.

Request a sample or find more information at http://www.siemon.com/z-plug