

Features

Secure Control

Allows API commands to be sent from a control system to a device while sanitizing/restricting the information that flows back

Design Approach

Built with two independent circuits each with its own dedicated processor, firmware & power supply

Isolation

Utilizes optical and ground plane isolation between the two circuits that are physically connected to the control system and device

Hardware Agnostic

Can be used seamlessly with all hardware platforms

Sanitized Feedback

16 optically isolated bits can be used to encode a “whitelist” of sanitized responses from the device being controlled

Credential Management

Capable of managing the credentials required to enforce device control port authentication

Product Specifications

FMS Integrated Product
Physical – .25 RU
Electrical – 20W
Environmental – 68 BTU/hr
RoHS, TAA & ITAR Compliant
Made in the U.S.A.

Risk management must be applied to the design and implementation of control systems in secure, multi-classification environments.

The Freeport Control System Isolator (CSI) prevents a control system processor from permanently inheriting the security classification of the device that it is connected to. The CSI mitigates potential security risks without having to limit functional requirements or hinder the ability to provide core support and management.

When a control system processor has unrestricted bi-directional access to the network through which a device is connected, it can draw data from that network and store it for later transport (Data Exfiltration). The CSI provides the means to program, control, and receive sanitized feedback from a device without the risk of accessing or exposing any data that might be contained in that device, or on the network to which it is connected.

The CSI utilizes a two-way communication path with the device but only a one-way communication path, plus status, back to the control system. It is built as two independent circuits (each with its own dedicated firmware and power supply), one circuit communicates with the control system and the other circuit communicates with the device. The CSI provides optical and ground plane isolation between the control system side of the isolator and the device side of the isolator.

The CSI also provides the ability to securely deploy a control system support and management network in a facility with devices connected to or capable of operating across multiple production networks at any given time.

