Maximizing data security to meet the highest reliability standards

Cyber and data security remain essential topics across all divisions and areas of Bosch, especially video systems and solutions. We embrace an end-to-end approach to maximize data security and cybersecurity. Following are our leading data security measures.

Crypto Co-Processors and Secure Elements

- Bosch CPP4 to CPP7.3 cameras are equipped with a Crypto Co-Processer
  - All devices have a closed OS (RTOS)
- Bosch CPP13 and CPP14 cameras are equipped with a Secure Element / EAL rated 6+
  - CPP13: Embedded closed Android OS
  - CPP 14: Embedded closed Linux OS and three-stage Secure Boot

Encrypted firmware

- Signed firmware and 2FA encrypted firmware prevents mounting a device and running executables from the device

Minimum TLS 1.2

- Bosch CPP13 and CPP14 cameras feature TLS 1.3 and 4K cert support

Simple Certificate Enrollment Protocol (SCEP)

- Bosch CPP13 and CPP14 cameras support SCEP with firmware 8.80
- ACME support is due in Q1 2024
- All devices come the following certificates: Escrypt Cert for manufacturers Authenticity, HTTPS Server Cert, Config Encryption Cert, AES Encryption Cert for Storage
  - Capable for VRM and edge encryption: When utilized with Bosch iSCSI format, cameras record in a proprietary block format that cannot be read / not a video file format.

Password enforcement

- Mandatory complex passwords, embedded login fire wall for brute force and DDOS protection

Cyber security certifications

- Currently holds the following certifications:
  - IoT Security Maturity Model (CPP6 to CPP14)
  - UL2900-2-2
  - IEC 62442

Additional features

- IP4 Filtering
- Easy lockdown with the ability to disable HTTP completely
  - HSTS, TLS 1.0, 1.1, and 1.2 functionality
  - 1.0 and 1.1 deprecated in CPP13 and CPP14
  - Easy protocol configuration based on the VMS the cameras are deployed with
  - MC TTL values can be configured to a specification

Bosch utilizes a Secure Engineering Process (SEP). All software and hardware are internally and externally pen tested. Bosch follows the OWASP Testing Guide, IoT testing guide, NIST and CIS standards, as well as STIG Testing. Bosch is also a Certified Numbering Authority for Miter.org.

Bosch Cyber & Data Security Details

For more information on Bosch measures for data security, register to attend our Cyber (Data) Security training courses at www.boschsecurity.us or contact Chesapeake & Midlantic Marketing for system design assistance in MD, VA, DC, PA, DE, and So. NJ: support@midches.com or (410) 612-9640