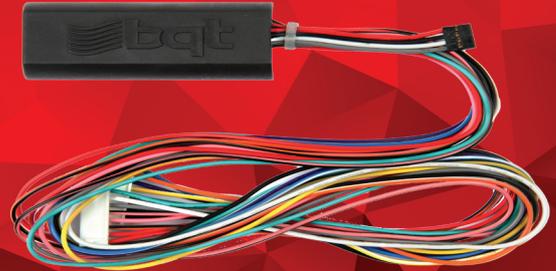


# HIGH SECURITY MODULE



## Product Overview

Designed to work with all insecure panels, the HSM will encrypt communication signals between the BQT Readers and the panel. By utilising this tool, existing Weigand panels can be left in place while readers are upgraded to output a secure signal that the HSM then converts back to Weigand at the panel. This ensures an absolute secure information path that cannot be compromised whether it be wall enclosed or a remote site such as an access gate. This encrypted communication can also travel much further than Wiegand communications.

## Why BQT Solutions

BQT Solutions is a specialist in the development, manufacture and supply of high quality, high security card and biometric readers, electromechanical locks and related electronic security products. Providing high security solutions to verticals such as Airports, Hospitals, Prisons and Government for over 35 years.  
*Innovating today for a more secure tomorrow*

## Product Benefits

### Benefit One

Innovation in encryption, the HSM is a highly secure encryption kit. Encrypting insecure Wiegand data, the HSM looks to offer an option to resecure your access control systems without having to upgrade your panels or current system designs.

### Benefit Two

The HSM communication protocol of RS485 provides for long cable runs, much longer than Wiegand so not only are the messages secure, they can be transmitted much further without any data loss.

### Benefit Three

The small size and nature of the HSM means it is easy to add into an access control system without taking up any significant space.

## PRODUCT APPLICATIONS

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Used across all market sectors to conveniently upgrade insecure sites without the need to replace panels.

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## PRODUCT FEATURES

### Compatibility

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The HSM will decrypt to a Wiegand format for compatibility with most old and new access control panels. This provides a security upgrade pathway without the need to change the control panel.

### High Security

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Encrypted communication travels between the BQT Reader and the HSM, ensuring a secure information path that cannot be compromised, whether wall enclosed or a remote site such as an access gate.

### Transmission

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The connection between a BQT Reader and an HSM is via RS485 communication, thus allowing the cable run to be up to 1.2km (4,000 ft) in length, providing greater flexibility and reducing installation costs.

### Converter

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HSM's can also be purchased in other formats to provide compatibility between many different reader output formats and controllers. Such as RS485, OSDP, or even between different Wiegand formats.

### Secure Encryption

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Working with your current system, the HSM offers flexible access control, with the option to use Wiegand, OSDP or Encrypted RS485 access data output and convert it into secure encryption unable to be read by others. The HSM provides additional benefits of being cost-effective and easy to wire and deploy across your sites, where different levels of encryption are needed for secure access control.

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## SPECIFICATIONS

- **Voltage at Reader**  
6VDC to 18VDC
- **Operating Temperature**  
-25°C to +65°C (-13°F to +149°F)
- **Relative Humidity (% max)**  
90%, operating non condensing
- **Dimensions**  
65mm (2.56") X 20mm (0.79") X 25mm (0.98")
- **Materials**  
Reader / Shroud Body: ABS  
Plastic  
Colour Finish: Charcoal
- **Feedback**  
Green/Red LED
- **HSM Encryption**  
128-bit AES Encrypted RS485
- **Converter I/O Formats**  
Wiegand, Plain/Encrypted RS485, OSDP
- **Compliance and Certification**  
FCC, CE, RCM, RoHS, IP65
- **Module Variants**  
B1000 – High Security Module (HSM)  
B1002 – Wiegand-RS485 Converter  
B1003 – RS485-Wiegand Converter  
B1004 – Wiegand-Wiegand Converter  
B1009 – Secure Data Encryption Kit  
B1010 – OSDP-Wiegand Converter

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