High Security Module

Most access control systems rely on the transfer of information through unsecured Wiegand lines to an access control panel from a front end reader, such as a smart card reader, biometric unit or a PIN (Personal Identification Number) terminal. Although the wiring itself is vulnerable to snooping and signal manipulation, the user's sensitive data can be protected with digital encryption.

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BQT has developed the High Security Module (HSM) as an addition to our range of Biometric and Mifare access solutions, which through encryption secures the transmission of data between BQT's miPASS readers and any standard security access control panel.

The connection between a miPASS reader and an HSM is via RS485 communication, thus allowing the card readers to be located up to 1.2km (4000 ft) from the control panel, providing greater flexibility and a reduction in installation cost.

Encrypted communication travels between the miPASS reader and the decryption module, thus ensuring an absolute secure information path that cannot be compromised whether it be wall enclosed or a remote site such as an access gate. The HSM unit can be installed How it worksFirstly, the miPASS reader retrieves the card data via contactless technologies such as Mifare, DESFire, or FIPS201 PIV.Next, it packages the data by using a choice of approved encryption methods such as 3DES, AES Rijndael, or Skipjack to the HSM. The secure package is then sent to the HSM using a unique session key that is never repeated.Finally, the HSM module decrypts the data quickly and forwards it to the controller.

Specificationspower requirement12Vdc current consumption60mA reader interfacePower: 12Vdc, GND RS485: 485A, 485B control panel interfacePower: Wiegand Wiegand: W0, W1 Notifications: LED, BUZ relaydry contact operating temperature-10oC to +55oC (14oF to 131oF) relative humidity90% max, operating non-condensing dimensions65mm x 20mm x 25mm (2.56" x 0.79" x 0.98") encryption• 3DES • AES 128 bit • SkipJack • Rijndael

• Custom configurations IP ratingIP67 colourCharcoal* Specifications subject to change without notice.