DATA SHEET
HSM High Security Module

bqt SOLUTIONS

Encryption
- 3DES
- AES 128 bit
- Custom Configurations

Secure Data Transmission – protected with advanced digital encryption

General Specifications

Power Requirement	- VDC regulated	12VDC
Current Consumption	- Average	73ma
	- Peak	100ma
Reader Interface	- Power	12VDC
	- Communication	RS485: 485A, 485B
Control Panel Interface	- Power	Wiegand
	- Communication	Wiegand: W0, W1
	- Notification	LED, Buzzer
Relay		Dry Contact
Operating Temperature	- Metric	-25°C to +65°C
	- USA	-13°F to +149°F
Relative Humidity	- % max	90%, operating non condensing
Dimensions	- Metric	65mm (L) x 20mm (W) x 25mm (D)
	- USA	2.56" (L) x 0.79" (W) x 0.98" (D)
Colour finish		Charcoal
Certifications		FCC, CE, C-tick, ROHS
IP Rating		IP65

HSM

Most access control systems rely on the transfer of information through unsecured Wiegand lines to an access control panel from the front end reader, such as a smart reader, biometric unit or PIN terminal. Though the wiring is in itself venerable to snooping and signal manipulation, the user's sensitive data can be protected with digital encryption. BQT Solutions has developed the High Security Module (HSM) as an addition to our range of Smart Card and Biometric access solutions, which though encryption secures the transmission data between a BQT Smart Reader and any standard security access control panel.

The connection between a BQT smart 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 a reduction in installation costs.

Encrypted communication travels between the BQT Smart Reader and the HSM, 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 decryption unit is recommended to be installed inside the control panel or other secure area.

Multiple HSM units may also be installed to encrypt and decrypt data from other devices such as those in BMS systems and other data transfer applications.

Secure Area

Maximum transmission length = 1.2km

Communications through RS485 lines, encrypted with 128 bit AES

wiegand output from HSM

ACCESS CONTROL SYSTEM