



BIOMETRICS



PRODUCT QUICK GUIDE



smartersecuritytoday

1. BQT Solutions Finger Biometric Readers

2. miPASS Overview.

3. Stand Alone Biometric Kits

4. Equipment and wiring diagram.

5. Pack 1 and 2

6. Pack 3 and 4

7. Pack 5 and Kit Summary

8. Pack Specification Guide

9. Custom and C.O.T.S Readers Overview

10.. Output and configuration

11. miPASS Access TMS Software Managed Systems

12. Configuration Diagrams

13. miPASS Access TMS Software

14. Ordering Information – SABIO and Custom Units

15. Ordering Information – MABIO units and software

16. Iris Recognition Biometrics

17. Facial Recognition Biometrics

Biometric Readers

BQT Solutions Biometric readers are available in two model variants, The BIO-X (without Keypad) and the BIO-XK (with Keypad).

Features of both units include,

- Indoor and Outdoor use IP65 Rating.
- Rugged and Robust design.
- High Accuracy 1:N and 1:1 throughput.
- Multiple methods of Template Management.
- High Speed of throughput.
- Stand alone door capability.
- RS485 to TCP/IP converter available.
- Available with Custom or miPASS encryption.
- HSM available for encrypted RS485 communications.
- Programmable function keys.



BIOX
Up to 2 factor Authentication
with Card and Fingerprint

BIOXK
Up to 3 factor Authentication
with Card, PIN and Fingerprint



miPASS))) 2

miPASS))) Access  TMS

miPASS))) 3

Secure “off the shelf” card readers

All of BQT Solutions Biometric Finger print readers come standard with card readers built in. All of our BIO Packs are standard with miPASS 2 enabled readers.

What is miPASS?

- miPASS® is BQT Solutions’ own range of Secure Smart Card and Reader Systems which we believe is simply the best in the market today.
- We have designed and developed our miPASS® smart card and reader systems using leading MIFARE® Technology and industry recognised encryption standards. The choice of two leading technologies means that miPASS® users can gain assurance that their assets, people, IP and data are receiving the best means in keeping safe and secure.
- miPASS® offers off the shelf convenience and cost effective, effortless secure access control for use in any access application right through to critical sensitive sites.
- Our miPASS®3 system is based on secure MIFARE® DESFire EV1® technology using 3DES encryption and offers high security for all access control applications.
- miPASS®2 is based on secure MIFARE Classic® technology using Crypto1® encryption and offers medium security for access control applications where risk vs economics is relevant

MIPASS READERS

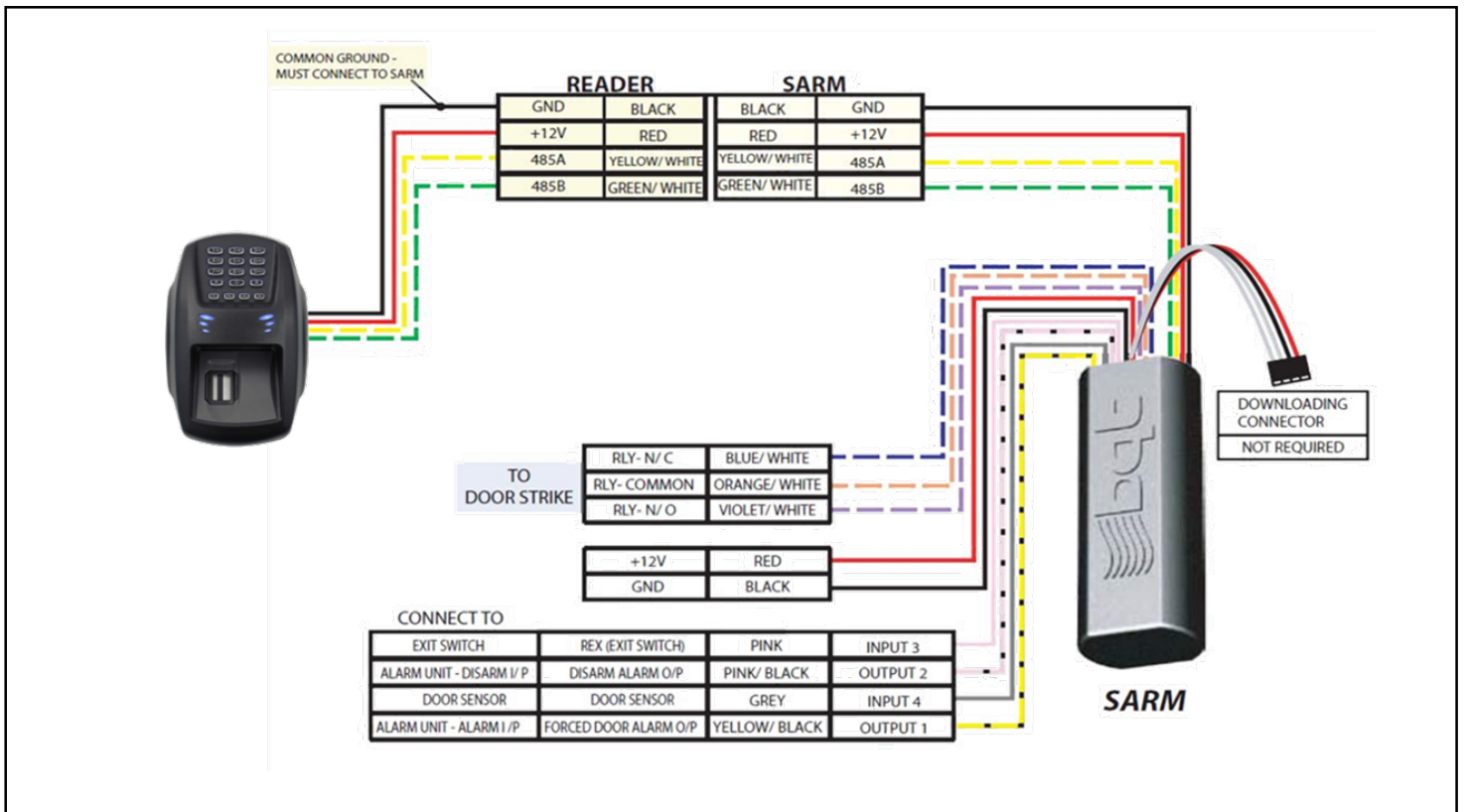
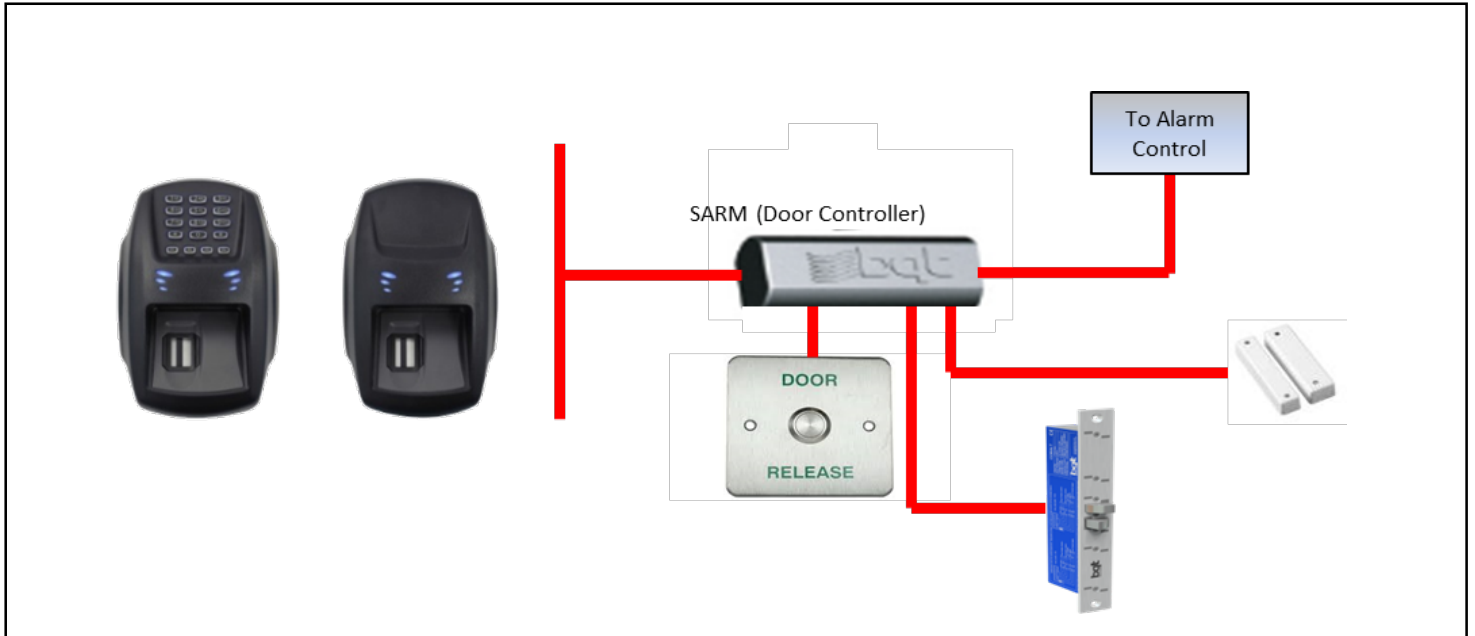


Stand Alone Kits

- miPASS® Bio kits include a BOIX/XK reader, SARM and set up cards, when coupled with ancillaries they provide a low cost flexible single or multi-reader Biometric access control solution.
- Whether the requirements are for a single reader or multiple readers, miPASS® Bio provides a unique solution for any organisation big or small.
- miPASS® Bio is available in several kit options to cater for the budget and operational requirement a site may have. miPASS® Bio kits are simple to install and manage, providing secure access for 50-500 users. Set up, enrolment and deletion of a user or group of users is completed with either an administration card, PIN or combination. No software or additional controllers are required. User details are stored on either the device or encoded on to the card.
- miPASS® Bio kits are supplied with a single door controller allowing autonomous operation and control over any locking mechanism. The controller (SARM) monitors for door alarms and tampering of the unit as well as providing ingress and egress control. miPASS® Bio kits are ideal for adding secure Biometric security within an existing solution or for securing any residential or commercial site.

- All SABIO Packs have **miPASS** 2 card readers built in.
- Pack Summary,
 - BQT4300, Finger only, manage user with ADD/DELETE user cards
 - BQT4310, Finger only, manage user with PIN
 - BQT4320, PIN & Finger
 - BQT4330, Card & Finger
 - BQT4350, Card & PIN & Finger
- There is no Audit Trail Available on SABIO Packs
- Each reader acts as a Read/Write device making user enrolment and template encoding possible from any reader. A remote fingerprint enrolment unit can be used for template on card.

Stand Alone Kits



Pack 1

- **Product Features & Specifications**
- **Maximum of 50 users**
- Two templates (fingers) recommended for each user
- User templates encrypted and stored in the scanner database
- 1:n template matching
- User enrolment and maintenance directly on scanner
- Ideal for small applications
- Add One user, Delete All users **VIA Add/Delete Cards**
- Designed for easy installation, setup and maintenance
- Reliable, secure and economical

Single Door Pack Includes:-

1 x BioX Fingerprint Biometric Scanner
 1 x SARM-S
 2 x Add User Cards
 2 x Delete User Cards
 1 x User Manual
 Part No: B2117G682000



Summary,

- Finger Only
- Enrol with Enrolment Card
- Delete All user and re enrol remaining users

Pack 2

- **Product Features & Specifications**
- **Maximum of 50 users**
- Two templates (fingers) recommended for each user
- User templates are stored in the scanner database
- 1:n template matching
- User enrolment and maintenance directly on scanner
- Ideal for small applications
- Add One User, Delete One User, Delete All Users **VIA Master PIN**
- Designed for easy installation, setup and maintenance
- Reliable, secure and economical

Single Door Pack Includes:-

1 x BioX Fingerprint Biometric Scanner
 1 x SARM-S
 1 x User Manual
 Part No: B2117G682001



Summary,

- Finger Only
- Enrol with master PIN
- Delete Individual users

Pack 3

- **Product Features & Specifications**
- **Maximum of 50 users**
- Two templates (fingers) recommended for each user
- User templates encrypted and stored in the scanner database
- 1:1 template matching
- 2- factor authentication – Bio + PIN
- User enrolment and maintenance directly on scanner
- Ideal for small applications
- Add One User, Delete One User, Delete All Users **VIA Master PIN**
- Designed for easy installation, setup and maintenance
- Reliable, secure and economical



Single Door Pack Includes:-
 1 x BioX Fingerprint Biometric Scanner
 1 x SARM-S
 1 x User Manual
 Part No: B2118G682000

- Summary,
- Finger and PIN (Verifier) Always need to use both
 - User has PIN reference
 - Enrol with master PIN
 - Delete individual user with Master PIN
 - Multiple units setup with on setup card

Pack 4

- **Product Features & Specifications**
- **Maximum of 500 users**
- Two templates (fingers) recommended for each user
- User templates encrypted and stored on the user's Card
- 1:1 template matching
- 2- factor authentication – Card + Bio
- User enrolment through scanner
- Additional units can be configured into one system via use of one Configuration Card
- Ideal for small applications
- Add One user, Delete One user, Delete All users **VIA Master PIN**
- Designed for easy installation, setup and maintenance
- Reliable, secure and economical



Single Door Pack Includes:-
 1 x BioXK Fingerprint Biometric Scanner
 1 x SARM-S
 1 x miPASS bio 1k Cards Convenience Pack (20)
 1 x Configuration Card
 1 x User Manual
 Part No: B2119G682000

- Summary,
- Finger and Card (Verifier) Always need to use both
 - User has Card reference
 - Enrol with master PIN
 - Delete individual user with Master PIN
 - Multiple units setup with on setup card.

Pack 5

• Product Features & Specifications

- Maximum of 500 users
- Two templates (fingers) recommended for each user
- User templates and User Pin are encrypted and stored on to the user's Card
- 1:1 template matching
- 3- factor authentication - Card, PIN & Bio
- User enrolment through scanner
- Additional units can be configured into one system via use of one Configuration Card
- Ideal for small applications
- Add One user, Delete One user, Delete All users **VIA Master PIN**
- Designed for easy installation, setup and maintenance
- Reliable, secure and economical



Single Door Pack Includes:-

- 1 x BioXK Fingerprint Biometric Scanner
- 1 x SARM-S
- 1 x miPASS bio 1k Cards Convenience Pack (20)
- 1 x Configuration Card
- 1 x User Manual
- Part No: B2120G682000

Summary,

- Finger, PIN and Card (Verifier)
- Enrol with master PIN
- Delete individual user with Master PIN
- Multiple units setup with on setup card

BQT Solutions Stand Alone Biometric Kits include,

- 1 x BIO-X or BIO-XK Fingerprint Biometric Scanner
 - 1 x Stand Alone Relay Module
 - 2 x Add User Cards
 - 2 x Delete User Cards
 - 1 x User Manual
- } only for units without a keypad

Specification KEY



Pack 1 – BQT4300



Pack 2 – BQT4310



Pack 3 – BQT4320



Pack 4 – BQT4330



Pack 5 – BQT4350

Custom and miPASS readers

“Wiegand Output Readers”

- BQT manufacture a range of Biometric readers for simple connection with either BQT or third party control systems. Using either industry standard Wiegand communications or more secure encrypted communication formats a simple 4 wire connection is all that is required.
- All devices are variations of the BIO-XK or the BIO-X reader designs, creating a uniform appearance and similar operation across the range.
- Each reader acts as a Read/Write device making user enrolment and template encoding possible from any reader.
- BIO-XK/X readers are factory configured and set to two fixed authentication options. These are Dual or Triple authentication (Finger on card) or (PIN, Finger on card) known as Template on card.
- Custom readers offer additional options such as Indexed. Indexed means that user data is stored in the reader itself, where as, Card template means that if used, all data is held on the users card and not stored elsewhere. Options for Card selection are broad and include the range of MIFARE options from CSN (Card Serial Number) through to DESFire.

Custom and miPASS readers

“Wiegand Output Readers

- The standard or Custom range of BIO-X/XK reader are designed for integration with most third party system or as a standalone solution.
- The readers are typically configured for template on card or template on device. (Note. Most MIFARE card technologies are compatible) (BIO-X = Card and Finger/Finger only) (Bio-XK = Card, PIN and finger/ Card and Finger/PIN and Finger)
- Communication between the reader and the controller can be Weigand (Multiple formats) or via other encoded formats via the RS485 output. Standalone function for controlling a single door is also possible with the addition of a SARM module and offers secure additional access control



Weigand or other
encoded comms
with third party
controller

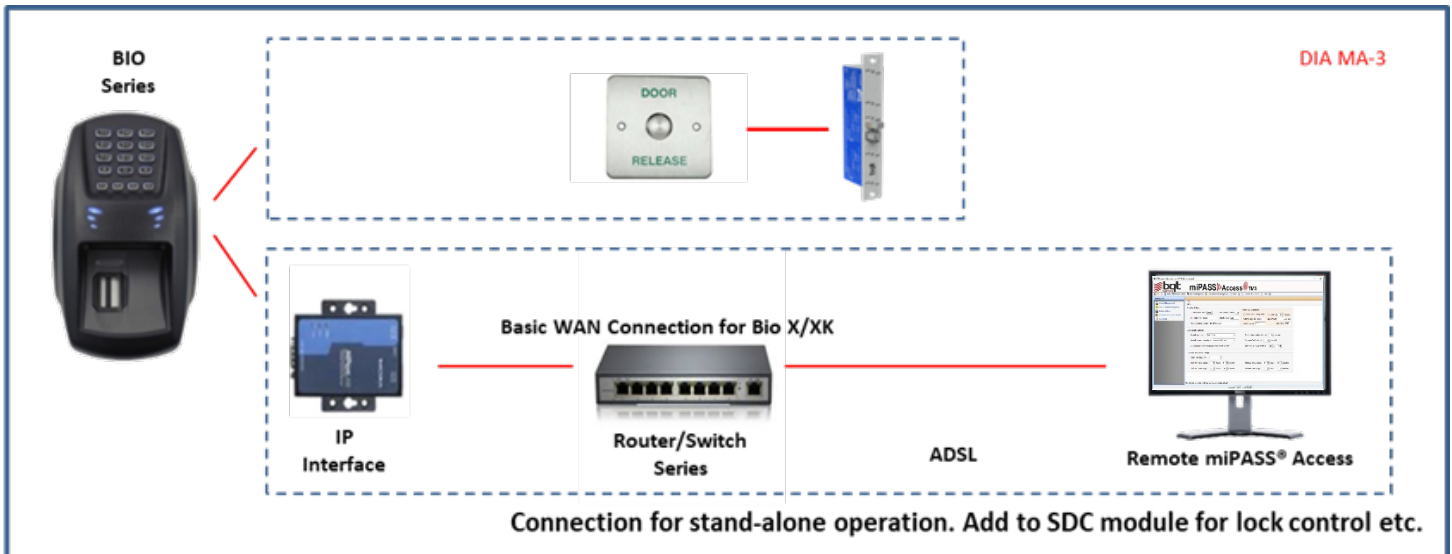
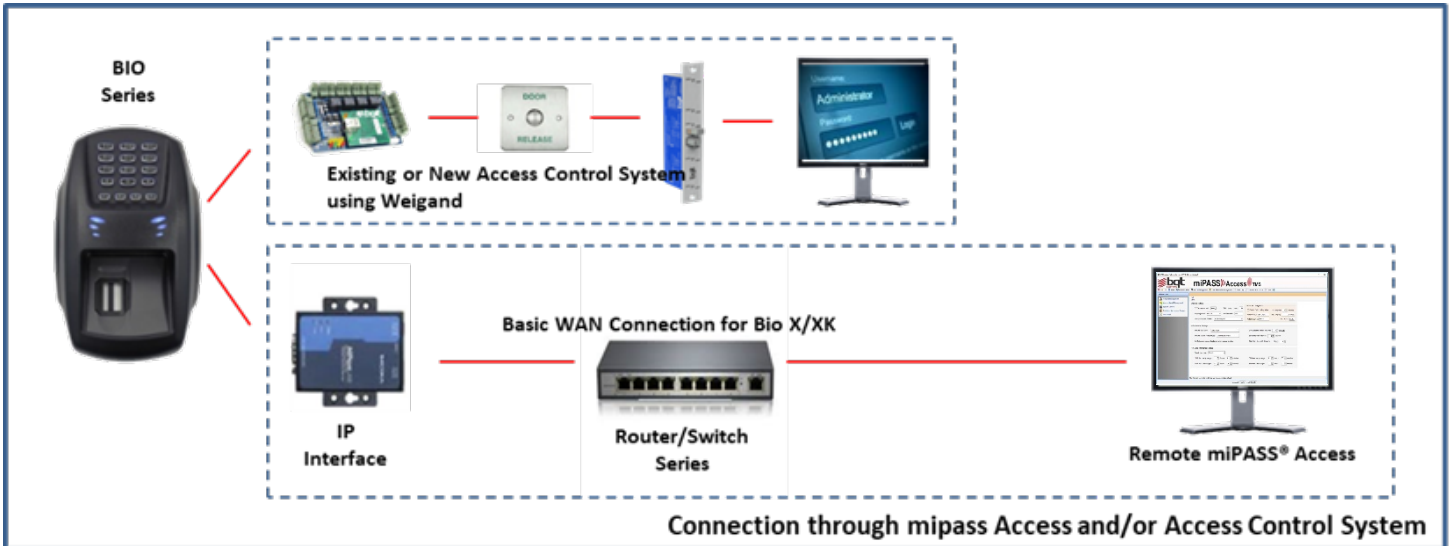
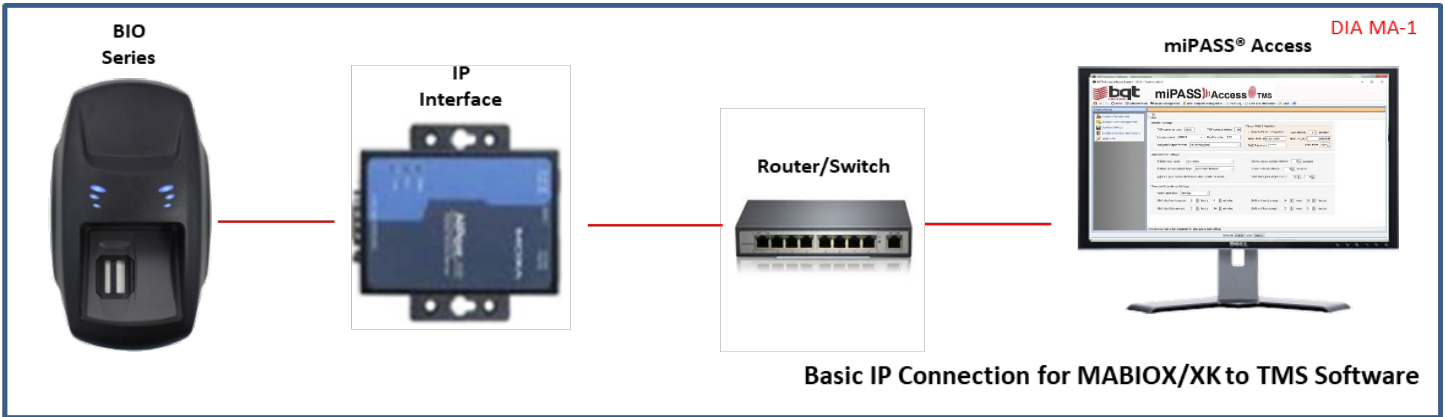


Software Managed Readers

miPASS)) Access TMS

- The IP miPASS Access TMS (Template Management Software) and miPASS Access enabled readers (MABio-X/XK) offer easy stand alone operation or 3rd party controller integration with management of user templates.
- MA readers allow organisations to select the method of authentication required for an individual staff member or visitor to gain access to a particular area(s). This feature provides significant flexibility when compared to conventional readers, where fixed authentication presents limited security options.
- Authentication can be done through BIO (Finger), Card, PIN or any combination desired.
- The miPASS TMS allows any reader to be used as an enrolment device as well as an operational device. Once enrolled on the TMS users can be uploaded to any MABio reader as required.
- MABio readers are extremely versatile and can operate autonomously or as part of a network solution. Stand-alone operation requires the use of BQT Solutions door module (SDC) and can operate as an Online/Offline solution with an activity memory of 5000 events.





Software

miPASS) Access TMS is BQT's Biometric access control system based on IP connectivity and biometric security. BIO X/XK devices work not only as a reader for multiple types of credentials, but also as an intelligent controller removing the need for a traditional controller.

miPASS) Access TMS offers key features that allow users to extend the system beyond conventional access control systems with useful employee management features that allow administrators to,

- > Define time, shifts, daily schedules and holidays.
- > Administer employees to comply with "On Site" and "Off Site" procedures.
- > Restrict access to off-duty employees and generate attendance reports.
- > Ability to generate a variety of reports including attendance and

DISTRIBUTED ACCESS CONTROL

- User Management
- Door management
- Access Management

ADVANCED ACCESS CONTROL

- Device Management
- Template Management
- Zone Management

TIME AND ATTENDANCE

- Monitor Attendance
- Hours worked calculations
- Holiday Leave and Shift Management








BIO-X

BIO-XK



Ordering Information

Reader	BQT Part Number	STAND ALONE KITS SABIO-X/K	Price
	B2117G682000	MP2 BioX Standalone Finger Biometric Pack - Kit 1 Standalone Finger Biometric Pack,50 user, miPASS®2, Template on unit, SARM-S, Add / Delete all cards (BioX), includes door lock relay.	
	B2117G682001	MP2 BioXK Standalone Finger Biometric Pack - Kit 2 Standalone Finger Biometric Pack,50 user, miPASS®2, Template on unit, SARM-S, Add / Delete Individual user / Delete all users (BioXK), includes door lock relay.	
	B2118G682000	MP2 Standalone Finger & PIN Biometric Pack - Kit 3 Standalone Finger & PIN Biometric Pack,50 user, miPASS®2, Template & PIN on unit, SARM-S, Add / Delete all cards (BioXK) includes door lock relay.	
	B2119G682000	MP2 Single Door Finger & Card Biometric Pack - Kit 4 Single Door Finger & Card Biometric Pack,500 user, miPASS®2, Template encrypted on user card, SARM-S, (BioXK) includes door lock relay. Multiple packs may be added as a system.	
	B2120G682000	MP2 Single Door Finger & Card & PIN Biometric Pack Kit 5 Single Door Finger & Card & PIN Biometric Pack,500 user, miPASS®2, Template & PIN encrypted on user card, SARM-S, (BioXK) includes door lock relay. Multiple packs may be added as a system.	

Reader	BQT Part Number	Off the shelf Mifare Classic and Mifare DESFire ("Wiegand Output") Kits	Price
	B9122G000000	BIO-XK miPASS2 Reader (Template/PIN on Card) miPASS2 - MIFARE Classic Secure Smart Card and Reader System, IP65	
	B9124G000000	BIO-XK miPASS 3 MIFARE DESFire Reader (Template/PIN on Card) miPASS3 - MIFARE DESFire Secure Smart Card and Reader System, IP65	
	B9102G000000	BIO-X miPASS2 Reader (Template on Card) miPASS2 - MIFARE Classic Secure Smart Card and Reader System, IP65	
	B9104G000000	BIOX-X miPASS 3 MIFARE DESFire Reader (Template on Card) miPASS3 - MIFARE DESFire Secure Smart Card and Reader System, IP65	

Custom Encryption and Output Readers are available, please talk to your sales contact for pricing and further information.

Ordering Information

Reader	BQT Part Number	Software Managed BIO reader Kits	Price
	B2121G681000	BIOX-1 miPASS Access Kit Package:MABioX-1 miPass Access Kit: 1 x MABioX-1 Charcoal (Mifare® CSN 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2121G682000	BIOX-2 miPASS Access Kit Package:MABioX-2 miPass Access Kit: 1 x MABioX-2 Charcoal (Mifare® Classic®, Crypto-1, miPass 2, 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2121G683000	BIOX-3 miPASS Access Kit Package:MABioX-3 miPass Access Kit: 1 x MABioX-3 Charcoal (Mifare® Classic®, Crypto-1, Custom key & output format), with TCP/IP-485 Converter and miPass Access Software	
	B2121G684000	BIOX-4 miPASS Access Kit Package:MABioX-4 miPass Access Kit: 1 x MABioX-4 Charcoal (Mifare® DESFire® EV1, 3DES, miPass 3, 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2121G686000	BIOX-6 miPASS Access Kit Package:MABioX-6 miPass Access Kit: 1 x MABioX-6 Charcoal (Mifare® Classic®, Mifare Plus®, DESFire® EV1, Crypto-1, DES, 3DES, AES128, Custom key & output format), with TCP/IP-485 Converter and miPass Access Software	
	B2122G681000	BIOXK-1 miPASS Access Kit Package:MABioXK-1 miPass Access Kit: 1 x MABioXK-1 Charcoal (Mifare® CSN 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2122G682000	BIOXK-2 miPASS Access Kit Package:MABioXK-2 miPass Access Kit: 1 x MABioXK-2 Charcoal (Mifare® Classic®, Crypto-1, miPass 2, 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2122G683000	BIOXK-3 miPASS Access Kit Package:MABioXK-3 miPass Access Kit: 1 x MABioXK-3 Charcoal (Mifare® Classic®, Crypto-1, Custom key & output format), with TCP/IP-485 Converter and miPass Access Software	
	B2122G684000	BIOXK-4 miPASS Access Kit Package:MABioXK-4 miPass Access Kit: 1 x MABioXK-4 Charcoal (Mifare® DESFire® EV1, 3DES, miPass 3, 32 bit), with TCP/IP-485 Converter and miPass Access Software	
	B2122G686000	BIOXK-6 miPASS Access Kit Package:MABioXK-6 miPass Access Kit: 1 x MABioXK-6 Charcoal (Mifare® Classic®, Mifare Plus®, DESFire® EV1, Crypto-1, DES, 3DES, AES128, Custom key & output format), with TCP/IP-485 Converter and miPass Access Software	

Iris Recognition

BQT Solutions also offer the IRISID Iris Recognition products. Iris recognition solutions provide highly accurate, non-contact identification by the iris of the eye from 14 inches away while delivering security, convenience, privacy and productivity to millions of people around the world. The iCAM7000's versatility and flexibility allows for easy integration with many Wiegand and network based access control, time and attendance, visitor management and point of sale applications.



The iCAM7 series has features no other iris system offers that enable rapid iris acquisition with greater image collection for superior enrollment and recognition.

- High Accuracy 1:N and 1:1 Capability
- High Speed – High Throughput
- Exceptional Flexibility and Ease of Integration
- Non-contact – Clean and Hygienic

Features

- Fast Fully Automatic Dual Iris Capture
- Easy Non-intrusive, Non-contact User Interface
- Integrated High Resolution Face Capture Camera
- Integrated Contactless Smart Card Reader
- Leverage Existing Infrastructure
- Capacity for Optional Third-party Surveillance Camera
- Easy Installation and Maintenance
- Remote Management
- Stand-alone Door Access Capability
- Flush or Recess Mounting
- Capable of 1:N Matching of Millions Depending on Architecture

Facial Recognition

BQT Solutions facial recognition unit operates on a standalone or networked format integrating with leading Access Control solutions. Guest PIN and a SILENT alarm output can be programmed if required. User Management is accessed easily through the device head or via software supplied with the unit

- Facial enrolment time for a user takes approximately 15 seconds with less than 250ms to authenticate a user.
- Users can be enrolled wearing glasses in most instances, where extreme circumstances exist the Reader will request their removal automatically.
- Over 2000 points are analysed by the device providing a low false read rate and high accuracy rate.
- The control unit provides a number of output options including Wiegand and RS485 and integrates to any Access Control System with the same level of flexibility a standard reader would provide.
- The controller also monitors and controls a number of functions including Lock time, DOTL, Forced door and access to an event log relating to the system or a specific user.
- User details for authentication can be either stored on the unit or on a separate data base. Management and use of the unit is spread across three categories from simple access us to set up and operational management.



Reliability & Support

‘A reliable Access Control System is a critical part of an organisation’s risk mitigation’

We know the importance of an access control system that works 24/7, 100% of the time and this is why we have developed our products to offer leading edge technology with reliability, quality design and best manufacturing.

We also provide reactive high level after sales support to help ensure that you get the best from our products.



Contact us today.

AUSTRALIA & PACIFIC	UK & EUROPE	MIDDLE EAST	GREATER ASIA	NORTH & SOUTH AMERICA
Phone: +61 (0)2 8817 2800	Phone: +44 (0) 17 3773 5071	Phone: +971 4 434 5357	Phone: +65 6220 7970	Phone: +1 650 397 6222
Fax: +61 (0)2 8817 2811	Fax: +44 (0) 17 3773 5072	Fax: +971 4 439 3406	Fax: +65 6220 7656	
Email: sales@bqtsolutions.com	Email: salesuk@bqtsolutions.com	Email: salesme@bqtsolutions.com	Email: salesasia@bqtsolutions.com	Email: salesamerica@bqtsolutions.com

www.bqtsolutions.com