



BS37K

Features

- ◆ Support up to 1900 and 9500 fingerprint storage capacity, matching time < 1 second.
- ◆ Each user able to enroll up to 10 finger for backup purpose
- ◆ Fingerprint templates auto renew feature. When live fingerprint data changes is detected (e.g. skin peeling), controller will automatically renew the template data with the current capture data.
- ◆ Adjustable security level. FAR is adjustable up to 1/100,000,000.
- ◆ Rapid matching features to increase fingerprint identification speed up to 10 times.
- ◆ Operation Mode: Valid Fingerprint Only or Card + Fingerprint will output the predefined Card ID in wiegand format.
- ◆ Support build-in reader module include EM and Mifare, card reader for Card + Fingerprint operation.
- ◆ Wiegand output to connect with all BS controller series.
- ◆ LED and Buzzer output.

Functional List

Function	Description
Operation Mode	Support Fingerprint Only, Card + Fingerprint.
Output Mode	Card ID: Wiegand 26/34
Connect to Controller	Connect to all BS controller series via wiegand interface
Standalone Fingerprint Enrollment	No
Online Download Fingerprint template	Download fingerprint directly from PC or via controller using RS485 (except single door controller)
Fingerprint Verification Security Level	1-5 Level, Default is 2, The higher the level, the more secure it will be but matching time will be longer
Fast Matching Mode	Able to set up to 6 levels. The higher the number, matching will be faster and will also increase the FRR rate.
Lightings Condition	Able to setup for Indoor or Outdoor usage.
Image Quality	Able to setup fingerprint image quality during enrollment.
Sensor sensitivity level	Able to setup the sensor sensitivity level to the fingerprint image.
Enrollment Mode	Able to select whether to enroll finger with one or two template.
Auto Scan	Fingerprint auto scan operation at all time.

Technical Specification

Parameter	Description
CPU	16 bits
Fingerprint Sensor	500 dpi optical sensor
Fingerprint Capacity	Support 1900 or 9500 templates.
Identification time	< 1 seconds
False Acceptance Rate(FAR)	Adjustable between 1/10,000 ~ 1/100,000,000
Equal Error Rate (EER)*	< 0.1%
No. of finger enroll per user	Up to 10
Wiegand Output	1
Serial Port	Connect to PC via RS-485
Baud Rate	1200~19200 bps. Default is 19200 bps
Controller ID Setting	001~255. Default is 1
Buzzer	1, audible sound able to distinguish valid and invalid finger
LED	Dual color LED
Power Supply	9~30VDC, 300mA
Operating Temperature	-10 ~ 50 °C
Dimension	138 X 52 X 58 mm
Casing	ABS flame-resistant

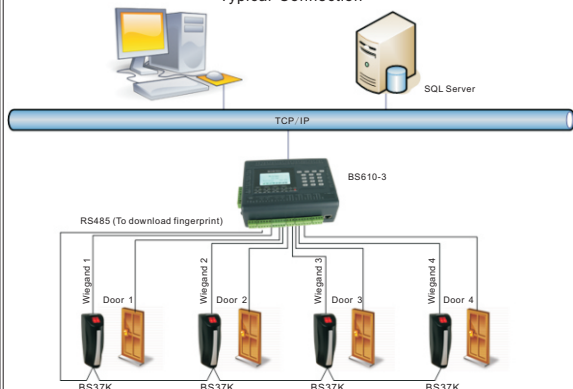
*EER means "Equal Error Rate" which is an error rate when FAR is equal to FRR. In our module, FAR can be controlled by setting "security level" parameter, 1/10,000 to 1/100,000,000. FRR varies with each FAR. For example, when setting FAR at 1/100,000 as default, FRR is roughly around 1%.

Model Selection

Model	Description
BS37K-XXX	Fingerprint Reader
BS37K-XXX-E	Fingerprint Reader, build-in EM Card reader, range > 5cm
BS37K-XXX-M	Fingerprint Reader, build-in Mifare Card reader, range > 2.5cm

Remark:
If need to purchase fingerprint controller with 9500 templates, please append (9500) behind the above model (e.g. BS37K-XXX(9500)).

Fingerprint Reader and Controller Typical Connection



BS37K

