



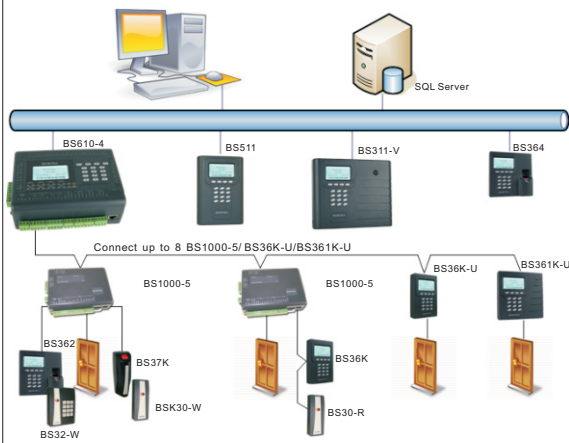
Features

- ◆ Using 32 bit ARM CPU, operate on embedded LINUX OS, speed up to 200MHz
- ◆ Direct connection to PC via TCP/IP. Connection via TCP/IP converter is not required. Transmission speed up to 100 Mbps
- ◆ Control up to 8 doors via local door controller (BS1000-5)
- ◆ Storage Capacity up to 100,000 cards and 100,000 transactions
- ◆ Support "Toggle Mode", mainly use for controlling on/off of large-scale electrical equipment
- ◆ Support Anti-passback with confirmation by door open
- ◆ Support Anti-tailgating
- ◆ Support Arm/Disarm function
- ◆ Support Door Interlock function
- ◆ Using Flash Memory to store data. Data can be stored up till 10 years without power supply.
- ◆ Recoverable up to the latest 100,000 transaction if back end system failure
- ◆ Firmware Online Upgrade via TCP/IP
- ◆ Designed with communication line voltage auto-detection feature. Able to send fault alert should there be any line tamper/interruption
- ◆ Build-in with PLC function, simplify integration between security and control system
- ◆ Field programmable alarm monitoring function such as duress, panic, emergency, fire, intrusion etc..
- ◆ Smart Door Lock capability. When system detect door open and close back, door will automatically lock back
- ◆ Super user card functions. During system failure, make use of super user mode to open door
- ◆ Programmable Time zone / Pin Access Control
- ◆ Build-in Programming Keypad
- ◆ CE Certified

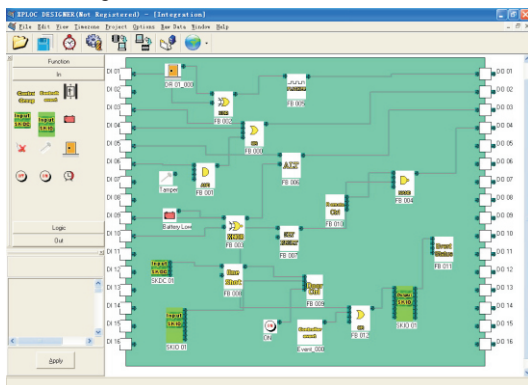
Functional List

Function	Description
Card Open Door	Present card to wiegand reader or 485 reader connect via BS1000-5
Card+PIN Open Door	(1) Directly connect with BS36K-U / BS361K-U reader. BS1000-5 is not required. (2) Connect BS36K-U/BS361K-U to BS1000-5.
Security PIN Open Door	(3) Connect BS36K, BS361K keypad reader to BS1000-5 via wiegand or RS-485 connector.
Card ID Open Door	(4) Open door either by enter Security PIN or Card ID (5) Open Door by Card + Pin: 4 digits PIN; By Security PIN: 8 digits PIN
Fingerprint Open Door	Connect to BS fingerprint reader to BSDC via wiegand connector. Open door method include: Card + Fingerprint, ID + Fingerprint, Fingerprint + PIN, Card + Fingerprint + PIN, ID + Fingerprint + PIN, Card Only, Card + PIN, PIN only, ID only etc.
Super User Card Open Door	During system failures, using predefine super user card to open door.
Connect External Wiegand Reader	Support any 26 or 34 bit or free wiegand card reader
Free Wiegand Setting	Yes. Able to configure card battery low-voltage alarm when used with long card reader.
Connect External Keypad Reader	Connect via BS1000-5 (1) HID wiegand keypad reader (2) BS readers inclusive BS32, BS36K and BS361K keypad reader via wiegand connector (3) BS36K-U and BS361K-UN
Connect External BS Fingerprint Reader	Yes. Via BS1000-5 wiegand connector
Connect to BS1000-5	Connect up to 8 BS1000-5, controlling 8 doors respectively.
Connect to BS1000-1	Connect up to 16 BS1000-1. Each consists of 8 DI and 8 DO
Connection to PC	(1) 485 or TCP/IP (2) Use keypad to setup Controller ID 001-255 (3) Use keypad to set IP Address, Subnet Mask and Gateway
Alarm functions	Support Door Left Open Alarm, Door Force Open Alarm, Temper Alarm and Local TTL Alarm
Door Left Open Alarm	1-255 seconds. Factory default is 5 seconds. Can be disabled.
Add/Delete Card in standalone mode	Yes
Dual-card Verification	Yes
Wrong PIN Control	During Card + PIN operation, if PIN enter incorrectly for predefine times, controller will be disabled for a predefine duration
Same Card Delay	0-255 seconds. Factory default is 0 second.
Time Zone Control	32 set of time zone
Holiday Control	Yes
Lost/Inhabit Card	Yes
Card Start and Expiry Date Validation	Yes
Door Auto Unlock by Timezone	Yes
Anti-passback	Yes (Local or Global). Able to reset manually or by time.
Card Number Output Byte	1-4 bytes. Default is 4 bytes
Card Number Display Format	HEX, DEC, ABA, User Code. Default is DEC
Communication Monitoring	Yes
Tamper Alarm	Yes
Power Supply Monitoring	Main power failure alert and backup battery low voltage alert
Door Sensor Setup	Door sensor setup including connection type, sensitivity, smart door lock control and record with confirm
External Backup Battery with charging capability	Yes

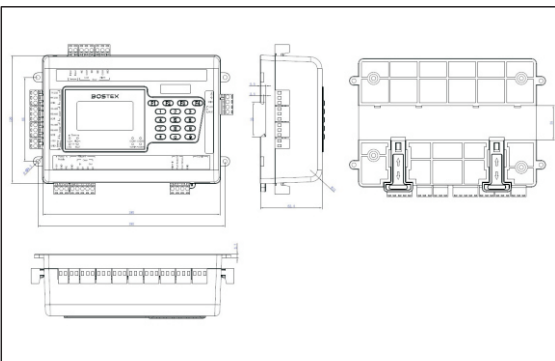
BS610-4 Controller Typical Connection



PLC Designer



Dimension (Unit: mm)



Functional List

Function	Description
PIN and Timezone Control	Yes. Able to setup whether enable PIN or Timezone control
Door Left Open Restore transaction	Yes
485 End of line resistor	Through jumper setting
485 Reader ID setting	Change 485 reader ID from controller and send via BS1000-5
Interlock	Setup for any 2 or more doors interlock control
Exit by Push Button Timezone Control	Yes

Technical Specification

Parameter	Description
CPU	32 bits ARM9 processor speed up till 200MHz
RAM	64MB SDRAM
Flash	16MB NOR Flash
Operating System	LINUX
Card Capacity	100, 000
Card Response Time	Based on 100,000 card stored, response time is less than 1 seconds
Record Capacity	100, 000
Serial COM Port	3 COM port (1) COM1 – PC or 2 nd level controller (2) COM2 – BS1000-5, BS1000-1, BS36K-U, BS361K-U (3) COM0 – Factory (Reserved)
TCP/IP	1, 10/100 Mbps auto switch, communicate with PC
USB	1 Master USB
JTAG	1
Keypad	128x64 dots Graphical, White Backlight, Chinese, English 4x4, Blue Backlight
TTL Input	16, use for PLC programming and system integration.
Analog Input	7
Relay Output	8. Able to direct connect to external devices, 12V/10A, use for PLC programming and system integration.
TTL Output	8. 5V/300mA use for PLC programming and system integration.
Build-in Hardware Watchdog	Yes
Build-in Real Time Clock	Yes
Hardware Reset Button	Yes
Tamper Switch Input	Yes
Buzzer	Yes
Real Time Clock Battery	CR2032, 3V
Power Supply	9~30VDC, 400mA
Operating Temperature	-10~50 °C
Dimension	129 x 180 x 62 mm
Casing	ABS flame-resistant
Mounting	Din rail mount

Model Selection

Model	Description
BS610-XXX-4	8 door controller, TCP/IP comm to PC