Product Catalog 2015

BioStar
IP Access Control & Biometrics

The Future is Easy

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Suprema Inc. is a global leader in biometrics and security technology. By combining world-renowned biometric algorithms with superior engineering, Suprema is able to continually develop and manufacture reliable industry-leading products. Suprema’s extensive portfolio of products include biometric access control systems, time & attendance devices, fingerprint/live scanners and embedded fingerprint modules.

Suprema supports a worldwide sales network that spans across more than 133 countries around the world and was the first biometrics company listed on Korea’s stock market (KOSDAQ 094840).
BioStar 2

Web-based Open Security Platform

BioStar 2 sets the new standard in security. The powerful biometric access control framework provides system integrators the ability to easily integrate with 3rd party systems and allows software developers to build new applications & functions into BioStar 2. Accessibility to BioStar 2 and its APIs is further extended through cloud services.

Powerful Open Platform

Build New Functionality into BioStar 2
BioStar 2 Extension Framework

Additional functionality can easily be developed using BioStar 2 extension framework.

Integrate with 3rd Party Systems
BioStar 2 API

The platform can easily be integrated with 3rd party systems, using BioStar 2 API.

Mobile Ready
BioStar Cloud Services

BioStar Cloud Service provides access to the platform anywhere through mobile solutions.
**Easy to Use**

- **Automatic user synchronization**
  New additions, deletions, and modifications of user data on the server will be automatically synchronized on the devices configured on the system.

- **Automatic device discovery**
  The feature allows the platform to detect all devices connected within the IP network for configuration and installation.

- **Automatic update notification via cloud**
  BioStar 2 receives system update notification through the cloud service. All updates can be installed with a few simple clicks or automatically depending on the system setting.

- **Simple deployment of sites**
  The web-server architecture significantly reduces deployment time by removing the need for software installations in client workstations.

- **Biometrics ready**
  BioStar 2 seamlessly integrates benefits and convenience of biometrics into the platform for use with access control.

**Enhanced Security**

- **Encrypted Communication**
  Communication between the server to the client is protected by HTTPS encryption, and communication between server to device is protected by 256bit AES encryption.

- **Encrypted Information**
  BioStar 2 also protects user data such as fingerprint, PIN, and password using 256bit encryption standards.
BioStar 1.x

IP Access Control and Time and Attendance Software

BioStar is a comprehensive access control and time and attendance management software featuring TCP/IP based system architecture with intelligent IP devices and terminals. It supports a wide range of third-party devices and integration with other business systems. It is the optimal solution that results in cost reduction and flexibility in design.

Software Editions

BioStar Basic Edition
BioStar 1.x Basic Edition is an ideal solution for small to medium sized enterprises. The software covers up to 20 devices and supports integration with various database systems, event monitoring, T&A management and reporting features.

BioStar Standard Edition
BioStar 1.x Standard Edition offers powerful and comprehensive access control features for full scale applications. Standard Edition controls up to 512 access control devices with IP camera/NVR integration, anti-passback, muster zone, e-mail notification and visual maps.

Specifications

<table>
<thead>
<tr>
<th>System</th>
<th>BioStar BE</th>
<th>BioStar SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>License</td>
<td>Free</td>
<td>USB Dongle</td>
</tr>
<tr>
<td>System Architecture</td>
<td>Client/Server</td>
<td>Client/Server</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows</td>
<td>Windows</td>
</tr>
<tr>
<td>DB</td>
<td>MSSQL, MySQL, Oracle</td>
<td>MSSQL, MySQL, Oracle</td>
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<tr>
<td>Server Matching</td>
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<td>Yes</td>
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<tr>
<td>Max Devices</td>
<td>20</td>
<td>512</td>
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<tr>
<td>Concurrent Client PC</td>
<td>2</td>
<td>32</td>
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<table>
<thead>
<tr>
<th>Access Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Schedule</td>
</tr>
<tr>
<td>Access Group/Level</td>
</tr>
<tr>
<td>Max Access Group per User</td>
</tr>
<tr>
<td>Door</td>
</tr>
<tr>
<td>Template on Card</td>
</tr>
<tr>
<td>Zone</td>
</tr>
<tr>
<td>Email Notification</td>
</tr>
<tr>
<td>Roll Call</td>
</tr>
<tr>
<td>Visual Map</td>
</tr>
<tr>
<td>Event Monitoring</td>
</tr>
<tr>
<td>IP Camera</td>
</tr>
<tr>
<td>NVR Integration</td>
</tr>
<tr>
<td>Lift Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work time Calculation</td>
</tr>
<tr>
<td>Shift Management</td>
</tr>
<tr>
<td>Holiday/Leave Management</td>
</tr>
<tr>
<td>Report</td>
</tr>
<tr>
<td>In/Out Board</td>
</tr>
</tbody>
</table>

List of Compatible Devices & Accessories

- BioStation
- BioStation T2
- BioStation
- BioStar
- BioLite Net
- BioEntry Plus
- BioEntry W
- X-Station
- Xpass
- Xpass S2
- BioMini
- Secure I/O
- Lift I/O
BioStar SE offers key features that allow users to extend the system beyond conventional access control. BioStar SE supports advanced access control zones and a powerful visual map, and lift management for control of up to 120 floors. Camera Integration provides visual log capabilities for a convenient merger of video surveillance and access control.

Advanced Access Control

- Real-time video monitoring
- Still image capturing
- Control of PTZ cameras
- Video log search through NVR

Visual Map Interface
- Graphical representation of the system
- Device/door settings modifications from the map
- Real-time monitoring on the map
- Event notifications in graphic icons
- Monitoring interface for doors and zones

Device Management
- Configure access control devices & I/O peripherals
- Server matching (Biometric matching on the server)
- Real-time monitoring of device connection
- Wizard-type device search interface
- Easy firmware upgrade and reset

Zone Management
- Fire alarm, alarm, anti-passback, entrance limit, interlock
- Master and access zones
- Controls up to 32 advanced zones
- Customizable alarm settings for each zone
- View event log for selected zones

IP Camera & NVR Integration
- Real-time video monitoring
- Still image capturing
- Control of PTZ cameras
- Video log search through NVR

Lift Management
- Control up to 120 floors
- Configurable per floor and user
- Dedicated lift I/O module support

Zone Management
- Fire alarm, alarm, anti-passback, entrance limit, interlock
- Master and access zones
- Controls up to 32 advanced zones
- Customizable alarm settings for each zone
- View event log for selected zones

Time and Attendance Features

BioStar SE includes features that allow administrators to define time categories, shifts, daily schedules and zones holidays. BioStar SE can administer employees to comply with check-in and check-out procedures, restrict access to off-duty personnel and generate attendance report. BioStar SE’s Time & Attendance features also give administrators the ability to generate a variety of reports.

Work Hour Calculation
- User-defined time category configurations
- Daily working schedule configuration
- Overtime calculation
- Rounding & Grace

Shift, Holiday & Leave Management
- Daily and Weekly cycle scheduling
- Multiple shift rules per user
- Holiday Schedule configurable per group
- Leave schedule configurable per user

User Management
- Four department levels
- Intuitive user search interface
- Multi-level administrator settings
- Customized authentication mode per user
- Biometric and card credentials

Access Control
- Control up to 128 access groups
- Control up to 128 time schedules
- Up to 32 configurable holidays

Door Management
- Four door group levels
- Control up to 512 doors
- Alarm features for each door

Distributed IP Access Control

BioStar is Suprema’s access control system based on IP connectivity and biometric security. Suprema 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.

- Fire alarm, alarm, anti-passback, entrance limit, interlock
- Master and access zones
- Controls up to 32 advanced zones
- Customizable alarm settings for each zone
- View event log for selected zones

- Graphical representation of the system
- Device/door settings modifications from the map
- Real-time monitoring on the map
- Event notifications in graphic icons
- Monitoring interface for doors and zones

- Configure access control devices & I/O peripherals
- Server matching (Biometric matching on the server)
- Real-time monitoring of device connection
- Wizard-type device search interface
- Easy firmware upgrade and reset

- Real-time video monitoring
- Still image capturing
- Control of PTZ cameras
- Video log search through NVR

- Real-time video monitoring
- Still image capturing
- Control of PTZ cameras
- Video log search through NVR

- Control up to 120 floors
- Configurable per floor and user
- Dedicated lift I/O module support

- User-defined time category configurations
- Daily working schedule configuration
- Overtime calculation
- Rounding & Grace

- Daily and Weekly cycle scheduling
- Multiple shift rules per user
- Holiday Schedule configurable per group
- Leave schedule configurable per user

- Four department levels
- Intuitive user search interface
- Multi-level administrator settings
- Customized authentication mode per user
- Biometric and card credentials

- Control up to 128 access groups
- Control up to 128 time schedules
- Up to 32 configurable holidays

- Four door group levels
- Control up to 512 doors
- Alarm features for each door
FaceStation
Smart Face Recognition Terminal

FaceStation perfectly combines beauty and performance. By providing contactless authentication at near real-time matching speeds, FaceStation offers unmatched user convenience and enhanced security synonymous with biometrics. It is ideal for applications that require convenient & secure authentication and can be used in either standalone or network environments.

Suprema Face Recognition Algorithm
Fake Face Detection
Intuitive UI
Versatile Interface
Videophone Capability

Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Max User</th>
<th>Max Template</th>
<th>Max Long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,000 (1:N)</td>
<td>250,000 (1:N)</td>
<td>1,000,000 (Text)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Interface</th>
<th>Comm.</th>
<th>Wiegand</th>
<th>Input / Output</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>TCP/IP, RS485, RS232, USB, WiFi (Optional)</td>
<td>1 in or Out</td>
<td>4 TTL Inputs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H/W</th>
<th>CPU</th>
<th>Memory</th>
<th>LCD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>667MHz RISC + 1.1GHz DSP</td>
<td>512MB RAM + 4GB Flash</td>
<td>4.3” Color Touch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Temp.</th>
<th>Power</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20° to 40°C</td>
<td>12 VDC, PoE (Optional)</td>
<td>132 x 165 x 60 mm (W x H x D)</td>
</tr>
</tbody>
</table>

Suprema Devices

Biometric Devices
- FaceStation
- BioStation T2
- BioStation 2
- BioStation
- BioLite Net
- BioEntry W
- BioEntry Plus

RFID Devices
- X-Station
- Xpass
- Xpass S2

Accessories
- Secure I/O
- Lift I/O
- Secure I/O 2
- DM-20
- BioMini

Kits
- Starter Kits

RFID CARD OPTIONS
• 13.56MHz Mifare/DESFire
BioStation T2

High Performance IP Fingerprint Terminal

Smarter Technology, Ultra Performance

BioStation T2 not only leverages a state-of-the-art device platform to provide an immense variety of features in a single device, but also takes advantage of Suprema’s world-renowned fingerprint technology to ensure speed and accuracy. It is ideal for applications that require a powerful & reliable hardware and an extensive feature set with a convenient user interface.

Specifications

Capacity

Max User: 200,000 (1:1) | 10,000 (1:N)
Max Template: 400,000 (1:1) | 20,000 (1:N)
Max Log: 1,000,000 (Text) | 5,000 (Image)

Interface

Comm.: TCP/IP, RS485, RS232, USB, WiFi (Optional)
Wiegand: 1ch In or Out
Input / Output: 4 TTL Inputs | 2 Relays

H/W

CPU: 667MHz RISC + 533MHz DSP
Memory: 256MB RAM + 1GB Flash
LCD: 5.0” Color Touch
Operating Temp: -20°C to 50°C
Power: 12VDC, PoE
Dimensions: 155 x 155 x 40 mm (W x H x D)

NEW

BioStation 2

Ultra Performance IP Fingerprint Terminal

New Standard in Biometric Access Control

BioStation 2 incorporates the latest Suprema technology in a beautiful exterior. It combines a new powerful processor, Suprema’s next generation optical sensor and improved fingerprint sensing & capturing algorithm to offer unrivaled performance. BioStation 2 provides users with instant authentication and rapid data transfer to manage high volume data with ease. It is ideal for applications that requires versatility without compromise in style and performance.

Specifications

Capacity

Max User: 500,000 (1:1) | 20,000 (1:N)
Max Template: 1,000,000 (1:1) | 40,000 (1:N)
Max Log: 3,000,000 (Text)

Interface

Comm.: TCP/IP, RS485, RS232, USB, WiFi (Built-in)
Wiegand: 1ch In and 1ch Out
Input / Output: 2 Input | 2 Output | 1 Relay

H/W

CPU: 1.0GHz
Memory: 128MB RAM + 8GB Flash
LCD: 2.8” Color
Operating Temp: -20°C to 50°C
Power: 12VDC, PoE
Dimensions: 142 x 144 x 45 mm (W x H x D)

Suprema Fingerprint Technology

Intuitive UI

Face Detection

Powerful Dual-CPU Architecture

Videophone Capability

Power-over-Ethernet Support

Instant Matching & Authentication

Rapid Data Transfer

Expanded Memory Capacity

IP65 Certified Dust and Water Protection

Versatile Interface

NEW
**BioStation**  
**Full-featured IP Fingerprint Terminal**

**Simple, Powerful, Reliable**

BioStation incorporates many fundamental features into a single reliable hardware platform. Its simple user interface allows users to effortlessly interact with the device and its large memory capacity provides storage for a large amount of data. It is the ideal cornerstone of any system requiring fingerprint technology and can be used in either a standalone or network environment.

- **Suprema Fingerprint Technology**
- **Interactive UI**
- **Dual-CPU Architecture**
- **Large Memory Capacity**
- **Versatile Interface**
- **Interphone**

**Specifications**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Max User</th>
<th>200,000 (1:1)</th>
<th>10,000 (1:N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max Template</td>
<td>400,000 (1:1)</td>
<td>20,000 (1:N)</td>
</tr>
<tr>
<td></td>
<td>Max Log</td>
<td>1,000,000 (Text)</td>
<td></td>
</tr>
<tr>
<td>Interface</td>
<td>Comm.</td>
<td>TCP/IP, RS485, RS232, USB, WiFi (Optional)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Input / Output</td>
<td>1 In and 1 Out</td>
<td></td>
</tr>
<tr>
<td>H/W</td>
<td>CPU</td>
<td>200MHz RISC + 533MHz DSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memory</td>
<td>34MB RAM + 1GB Flash</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCD</td>
<td>2.4” Color</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operating Temp</td>
<td>-20° to 50°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>12VDC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dimensions</td>
<td>135 x 128 x 50 mm (W x H x D)</td>
<td></td>
</tr>
</tbody>
</table>

**BioLite Net**  
**Smart Outdoor IP Fingerprint Terminal**

**All-round Excellence**

BioLite Net is a compact IP fingerprint terminal that has been designed to fit on a mullion mount. BioLite Net's IP65 rating for protection against dust and water makes it suitable for both indoor & outdoor use and its simple user interface allows for quick easy access to the device. It is ideal for applications that require basic user interaction and a variety of installation environments.

- **Suprema Fingerprint Technology**
- **Sleek Unobtrusive Design**
- **Environment Protection (IP65)**
- **Interactive UI**
- **Versatile Interface**

**Specifications**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Max User</th>
<th>5,000 (1:1)</th>
<th>5,000 (1:N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max Template</td>
<td>10,000 (1:1)</td>
<td>10,000 (1:N)</td>
</tr>
<tr>
<td></td>
<td>Max Log</td>
<td>50,000 (Text)</td>
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</tr>
<tr>
<td>Interface</td>
<td>Comm.</td>
<td>TCP/IP, RS485</td>
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</tr>
<tr>
<td></td>
<td>Input / Output</td>
<td>2 In and 1 Out</td>
<td></td>
</tr>
<tr>
<td>H/W</td>
<td>CPU</td>
<td>533MHz DSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memory</td>
<td>16MB RAM + 8MB Flash</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCD</td>
<td>1.35” B/W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operating Temp</td>
<td>-20° to 50°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>12VDC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dimensions</td>
<td>60 x 185 x 40 mm (W x H x D)</td>
<td></td>
</tr>
</tbody>
</table>
BioEntry W Smart Outdoor IP Fingerprint Device

Rugged & Secure
BioEntry W is a robust high performance fingerprint access control device designed to provide 3-way protection against dust, water and vandalism. BioEntry W also has Power-over-Ethernet capabilities giving it the perfect edge for easy installation. It is ideal for applications that require fingerprint technology and can be used with a variety of installation environments.

- Suprema Fingerprint Technology
- Sleek Unobtrusive Design
- Environment protection (IP65)
- Vandal Resistant Housing (IK08)
- Versatile Interface

Power-over-Ethernet Support

Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Max User</th>
<th>5,000 (1:1)</th>
<th>5,000 (1:N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Template</td>
<td>10,000 (1:1)</td>
<td>10,000 (1:N)</td>
<td></td>
</tr>
<tr>
<td>Max Log</td>
<td>50,000 (Test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RFID CARD OPTIONS</td>
<td>125KHz HID Prox + 13.56MHz MIFARE + iCLASS SE/Felica</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interface</th>
<th>Comm. TCP/IP, RS485</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input / Output</td>
<td>1ch In, 1ch Out</td>
</tr>
<tr>
<td>LCD</td>
<td>-</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>-20°C to 50°C</td>
</tr>
<tr>
<td>Power</td>
<td>12VDC, PoE</td>
</tr>
<tr>
<td>Dimensions</td>
<td>50 x 172 x 42 mm (W x H x D)</td>
</tr>
</tbody>
</table>

BioEntry Plus Smart IP Fingerprint Device

Designed for Simplicity
BioEntry Plus exquisitely blends the benefits of an IP access control system with the added security provided by biometrics. It is the base of Suprema’s IP fingerprint product line and a good indoor solution to any system requiring fingerprint technology.

- IP Access Control
- Suprema Fingerprint Technology
- Sleek Unobtrusive Design
- Versatile Interface

Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Max User</th>
<th>5,000 (1:1)</th>
<th>5,000 (1:N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Template</td>
<td>10,000 (1:1)</td>
<td>10,000 (1:N)</td>
<td></td>
</tr>
<tr>
<td>Max Log</td>
<td>50,000 (Test)</td>
<td></td>
<td></td>
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<tr>
<td>RFID CARD OPTIONS</td>
<td>125KHz EM + 125KHz HID Prox + 13.56MHz MIFARE + iCLASS</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Interface</th>
<th>Comm. TCP/IP, RS485</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input / Output</td>
<td>1ch In, 1ch Out</td>
</tr>
<tr>
<td>LCD</td>
<td>-</td>
</tr>
<tr>
<td>Operating Temp</td>
<td>-20°C to 50°C</td>
</tr>
<tr>
<td>Power</td>
<td>12VDC</td>
</tr>
<tr>
<td>Dimensions</td>
<td>50 x 160 x 37 mm (W x H x D)</td>
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</table>
X-Station  Smart IP RFID Terminal

Universal, Secure
X-Station is a formidable device that combines a vast array of components into a slim form factor. X-Station's 3.5" touchscreen LCD provides the perfect interface to an intuitive UI and its camera, speaker and microphone allow for advanced features such as Face Detection and Videophone capabilities. It is a versatile product that can be used in a variety of applications.

Specifications
- Capacity: Max User 200,000, Max Template -
- Interface: Comm. TCP/IP, RS485, Wiegand 1ch Host and Slave, Input / Output 2 TTL Inputs | 1 Relay
- H/W: CPU 667MHz RISC, Memory 128MB RAM + 1GB Flash, LCD 3.5" Color touch, Operating Temp. -20° to 50°C, Power 12VDC, Dimensions 79 x 135 x 21 mm (W x H x D)

Xpass  Smart IP RFID Device

Progressive Technology
Xpass effortlessly combines key features of a traditional access control system in a compact form factor and is a cornerstone in Suprema's distributed IP access control system. Xpass can be used in both indoor and outdoor environments and the Power-over-Ethernet connection allows for quick and easy installation.

Specifications
- Capacity: Max User 40,000, Max Template -
- Interface: Comm. TCP/IP, RS485, Wiegand 1ch Host and Slave, Input / Output 2 TTL Inputs | 1 Relay
- H/W: CPU 533MHz DSP, Memory 16MB RAM + 8MB Flash, LCD - , Operating Temp. -20° to 50°C, Power 12VDC, PoE, Dimensions 45 x 130 x 27 mm (W x H x D)
Xpass S2 Ultra Slim Smart IP RFID Device

Revolution in Access Control

Xpass S2 effortlessly combines key features of a traditional access control system in a ultra slim form factor and is a cornerstone in Suprema's distributed IP access control system. Xpass S2 is designed to withstand a wider temperature range and can read multiple smartcard technologies making it an ideal product for harsh weather environments.

Specifications

- **Capacity**
  - Max User: 50,000
  - Max Template: 1,000 (Supported in BioStar 2 Only)
  - Max Log: 100,000 (Text)
- **Interface**
  - Comm: TCP/IP, RS485
  - Wiegand: 16 or 32 bit
  - Input/Output: 12 TTL Inputs / 1 Relay
  - CPU: 512 MHz DSP
  - Memory: 16MB RAM + 16MB Flash
- **H/W**
  - Operating Temp: -35°C to 65°C
  - Power: 12VDC
  - Dimensions: 80 x 120 x 11.4 mm (W x H x D)

RFID CARD OPTIONS

- 13.56MHz Mifare/DESFire/Felica

Xpass S2 is designed to withstand a wider temperature range and can read multiple smartcard technologies making it an ideal product for harsh weather environments.

Secure I/O

Secure I/O Expansion Module

Secure I/O provides secure door control as well as I/O expansion via encrypted communication when combined with other Suprema devices.

Specifications

- **Interface**
  - Comm: RS485
  - Inputs: 4x TTL
  - Relay: 2x Form C
- **H/W**
  - Power: 12VDC (500 mA)
  - Operating Temp: -20° to 50°C
  - Dimensions: 142.5 x 81.9 x 39 mm (W x H x D)

※ Compatible S/W: BioStar 1.x Only

Lift I/O

Lift I/O is purpose built expansion module designed for elevator floor access control. Combined with a Suprema device and BioStar software, a single module can securely control up to 12 floors via encrypted connection. Lift I/O can be linked in daisy chain configuration up to 10 devices for control of 120 floors.

Specifications

- **Interface**
  - Comm: RS485
  - Inputs: 12x TTL
  - Relay: 12x Form C
- **H/W**
  - Power: 12VDC
  - Operating Temp: -20° to 30°C
  - Dimensions: 140 x 240 x 32 mm (W x H x D)

※ Compatible S/W: BioStar 1.x Only

Secure Floor Access Control I/O Module

Secure Floor Access Control I/O Module is a single module that can securely control up to 12 floors via encrypted connection. Lift I/O can be linked in daisy chain configuration up to 10 devices for control of 120 floors.

Specifications

- **Interface**
  - Comm: RS485
  - Inputs: 12x TTL
  - Relay: 12x Form C
- **H/W**
  - Power: 12VDC
  - Operating Temp: -20° to 30°C
  - Dimensions: 140 x 240 x 32 mm (W x H x D)

※ Compatible S/W: BioStar 1.x Only
BioMini

USB Fingerprint Enrollment Device
BioMini provides system operators the ability to enroll fingerprints from any PC running a BioStar Client.

Specifications
- Sensor: Optical (IP65 sensor surface)
- Resolution: 500 DPI, 256 grey
- Sensing Area: 28 x 32mm
- Interface: USB 2.0 High Speed
- Operating Temp: -10° to 50°C
- Dimensions: 66 x 30 x 18mm (W x H x D)

Starter Kits

Essential Components for Evaluation
Suprema Starter Kits provide users with the fundamental components to experience Suprema’s IP access control system.

Components
- Suprema Device
- 12VDC Power Adaptor
- Plastic Stand
- Secure I/O (Select models only)
- Command Cards (Select models only)
- BioStar Software
- BioStar SDK
- Technical Documents
## Hardware Specification

### Suprema Device Portfolio

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature</th>
<th>FaceStation</th>
<th>BioStation T2</th>
<th>BioStation 2</th>
<th>BioStation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main</strong></td>
<td><strong>Biometric</strong></td>
<td>Face</td>
<td>Fingerprint</td>
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<td>667MHz CPU + 1.1GHz DSP</td>
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<td><strong>Dimensions (W x H x D mm)</strong></td>
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<td>CE, FCC, IC, RoHS</td>
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<td>BioStar 1.x</td>
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<td>BioStar 2</td>
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1 Requires F/W Update

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### BioLite Net | BioEntry W | BioEntry Plus | X-Station | Xpass | Xpass S2

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<tr>
<th><strong>Fingerprint</strong></th>
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<tr>
<th><strong>1ch Host or Slave</strong></th>
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<th><strong>1ch Host or Slave</strong></th>
<th><strong>1ch Host or Slave</strong></th>
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</table>

<table>
<thead>
<tr>
<th><strong>Sound</strong></th>
<th><strong>Sound</strong></th>
<th><strong>Sound</strong></th>
<th><strong>Sound</strong></th>
<th><strong>Sound</strong></th>
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<tbody>
<tr>
<td>Multi-tone Buzzer</td>
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<td>Multi-tone Buzzer</td>
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<td>-20°F to 50°F</td>
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<td>-35°F to 65°F</td>
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<th><strong>Rotation</strong></th>
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<th><strong>Certifications</strong></th>
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<tbody>
<tr>
<td>CE, FCC, IC, RoHS</td>
<td>CE, FCC, IC, RoHS</td>
<td>CE, FCC, IC, RoHS</td>
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<thead>
<tr>
<th>Compatibility</th>
<th>BioStar 1.x</th>
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</table>

1 Requires F/W Update
**Business Highlights**

**Company at a Glance**
- **Headquarter**: South Korea
- **Foundation**: May 4, 2000
- **Business Area**: Access Control and Time & Attendance
  - Embedded Modules
  - ID Scanners
- **Global Business**: 133 Countries worldwide over 1,000 customers (2014)
- **Market Capital**: USD 436 Million (2014)
- **Growth**: CAGR of 38% (2006-2014)
- **Financial Status**: Listed company in South Korea’s stock exchange (KOSDAQ)

**Key Solutions & Technologies**
- **TECHNOLOGIES**
  - FACE
  - FINGERPRINT
  - RFID
  - Embedded Modules
  - ID Scanners

**Global Sales**

Stable revenue stream from over 950 Customers across 133 countries

**Business Growth**
- CAGR of 38% (2006-2014)
- Sales Network in 133 Countries
- Market Capital: $436,000,000 (Dec, 2014)

**Our Advantages**
- **Technology**
  - World’s best performing fingerprint algorithm
  - Industry-leading international awards and certifications
- **Quality**
  - Manufactured by high quality IT production facilities in South Korea
  - Made from top quality components and materials
- **Partnership**
  - Global partner program for training, technical support & upgrades
  - Structured sales policy through authorized distribution channel
Vertical Market

Manufacturing
- Kuwait National Petroleum Company, Kuwait
- Baltic Shipyard Factory, Estonia

Transportation
- Karachi Airport, Pakistan
- Dubai Airport, UAE
- Tehran Metro, Iran

Government
- Colombia National Police, Colombia
- Saudi Royal Council, Saudi Arabia
- De Hoop ggz, Netherlands
- Argentina University Hospital, Argentina
- King Saud University, Saudi Arabia
- Istanbul University of Turkey, Turkey

Commercial
- Panorama Tower, USA
- Daiso Japan, Japan
- Hotel Alma Pamplona, Spain
- Carrefour, Turkey
- Tiffosi, Portugal
- ZARA, Venezuela

Banking & Finance
- Caixa Bank, Brazil
- Central Bank of the Philippines, Philippines

Retail
- King Saud University, Saudi Arabia
- Istanbul University of Turkey, Turkey

Education

Awards

Company Related Awards

1. A&S international Magazine
   - World's Top 50 Security Company

2. Frost & Sullivan
   - Biometrics Company of the Year

3. Deloitte
   - Technology Fast 500

4. Forbes Asia
   - 200 Best Under a Billion

Product Related Awards

- Detektor International
  - Innovative Achievement Award
    - FaceStation, BioStation
  - Best Product Award
    - BioLite Net

- Biometric System Laboratory
  - FVC, FVC Ongoing
    - Top Ranked

- MINEX
  - MINEX Test
    - Top Ranked

- mips
  - Best Innovative Product Award
    - Access Control & Visitor Management

- IFSEC International
  - AC Product of the Year Finalist
    - FaceStation, BioLite Net

- ALL-OVER-IP
  - Best Product Award
    - BioEntry W

Certification

- ISO 14001 : 2004
  - Environmental Management
- ISO 9001 : 2008
  - Quality Management