BOSCH

Invented for life

Access Easy Master Controller

- ▸ **Supports a maximum of 20 AEC over WAN/LAN**
- ▸ **Support client computers running off Windows 2000/ XP, Macintosh or Unix operating systems, independent of versions and hardware type**
- ▸ **Database Engine is based on SQL and ODBC compliances**
- ▸ **Full Web Client Architecture**
- ▸ **Distributed Network Capabilities**
- ▸ **Unified Messaging**

Built on the same technology platform of the Access Easy Controller (AEC), the Access Easy Master Controller (AEMC) offers a centralized access management for all the AECs in the network. With AEMC, you can now expand your system from a basic 16-reader installation to a maximum of 320-reader installation. All basic application modules run off on the AEMC which behaves as a web server to deliver a single, seamlessly integrated solution. The integrated access control and alarm monitoring subsystems deliver maximum protection, simple operation and cost efficiency.

All AEMC application incorporates the most advanced technologies available, including object-oriented software and advanced client/server SQL database. All client application runs on standard web browser application like Microsoft Internet Explorer, Netscape, or Mozilla Firefox.

Functions

Platform and hardware independent

Since all application resides in a web server . AEMC is independent of the client computer hardware type, operating systems and versions. Its SQL database engine is ODBC compliant and the communication network is based on Ethernet and TCP/IP. AEMC has also been designed to seamlessly integrate with external applications and

peripheral devices. AEMC has many built-in automatic tools for easy administration, such as import/export data functions and report generation.

Scalability

AEMC is designed for small to medium size installations, ideal for deployment to multiple remote offices or buildings. The AEMC is designed to control up to 20 AEC that controls up to 320 access readers and 1280 I/O points via a fast LAN/WAN network.

Centralized Database Management

Database for each AEC is configured by administrators at the AEMC. The database of the AEMC is then synchronized with all the AEC databases on the fly. Advanced access groupings and 1024 access levels definition offers wide ranging access control setup of all cardholders in the entire system.

Centralized Alarm Handling

AEMC provides centralized alarm handling received from AEC, transactions & audit trails logging and report generation, all operated through standard browser software.

Distributed Network Architecture

AEMC distributed network architecture allows client workstations and AEC to be installed directly on any existing Ethernet network. All local access decisions are made and processed at the AEC, minimizing network traffic and providing real time access processing and decision. System administration, monitoring and remote control functions can be performed at any client workstation on the network.

Installation/Configuration Notes

Access Control
- Single site or multi-sites access control management
- Access control of doors, elevators or car parking structures
- Distributed, Scalable/Segmented Architecture

Administration and User
- Support up to 25 system administrators
- 128-bit SSL encryption for web browser
- Up to 8 character alphanumeric, case sensitive user ID and password
- Up to 25 concurrent login

System Parameters
- Controls and manage up to 20 AEC
- 320 Wiegand access readers system wide (16 per AEC)
- 1024 global access levels system wide
- 254 local access groups per AEC
- 256 global schedules
- 32 global holidays
- 32 global special holidays

Card Access Parameters
- Card capacity up to 409,600 cardholders system wide (20,480 per AEC)
- 16 programmable Wiegand card formats
- Multi-Card function type: Normal, Attendance Capture, Arm/Disarm
- Multi-Card operation: Card only, Card + User PIN code, Reader PIN code
- Single and batch cards entry feature - card add/delete
- Wild card search capability by selectable cardholders' profile

Global I/O
- 640 input monitoring points system wide (32 per AEC)
- 2-state and/or 4-state alarm monitoring (selectable)
- 640 relay output points system wide (32 per AEC)
- Remote arming/disarming via web browser
- Arming/disarming by single or group of points
- Programmable alarm text instructions for guard's action, for each input monitoring point
- Advanced programmable I/O features for global automation process
- Any I/O may be linked globally to create an automation process
- Access control and system events may be linked to I/O for secondary events
- Any alarm condition can drive any relay output

- Full alarm management functions for up to 128 priority levels
- Online hardware equipment diagnostics and reporting

Global Access Level and local Access Groups
- Each definition consists of doors and time schedules
- Access to each door may have its own unique time schedule

Activities Monitoring and Controls
- Real-time transaction monitoring of all events and alarms, such as door-left-open, door-forced-open, duress, anti-passback violations, and more...
- Display all activity as they occurred, normal or alarms. Alarm messages will remain in alarm screen if the sensor remains in alarm mode even it has been acknowledged
- Communication line failures, tampers, power fails, etc. are all reported as alarm conditions
- Remote control functions for door lock/unlock via web browser
- Remote control functions for arming/disarming of alarm devices via web browser
- Remote control functions for all I/O via web browser
- Alarm handling at AEMC
- All alarm events will generate audio and visual alarms on the monitoring computer. Alarms with higher priority will be displayed and stacked on top of all alarms of lower priority
- Alarm messaging for visual display on monitoring computers or via e-mail or SMS messaging to GSM cell phone network on AEC
- All e-mail events, status and alarm messages include description of event, ID, location, date and time stamp on AEC
- Any door or group of doors may be unlocked from the computer for administrators given such access rights
- Define auto unlock time periods, based on day and time for any doors. Time refers to a start and end time. Doors will not unlock during holidays unless programmed to do so
- Any input or group of inputs may be automatically armed or disarmed based on time periods for the day and time. During holidays, system will remained armed 24 hours
- Any input or group of inputs may be armed or disarmed at any devices and/or from the computer for users give such access rights
- If higher access control security measures is required, Card + User PIN code mode can be switched in automatically based on time control e.g. after office hours and holidays
- Management staff may have free access 24 x 7, and PIN codes may be activated full day during holidays

Audit Trails and Reports Generation
- Any changes made to database are logged with the name of the user making the changes and date and time of the changes
- Activity and Audit Trail report generation
- Reports can be generated by devices, location, events, alarms cardholders, time and date criteria
- Users and administrators' access rights
- Cardholders database

- I/O points and database setup
- System status reporting (e.g. network communication)

Database

- SQL database as standard, ODBC compliant
- Automatic database synchronization between AEMC and AEC
- Database backup (AEMC + AEC) to remote computers or archive device
- All AEC and AEMC parameters will be stored in the AEMC and can be back up to remote computer for long term archive
- Database for AEC and AEMC can be restored when any AEC or AEMC failed

Advanced Functions

Off-line Processing

- All access control decisions are made by the AEC in off-line mode when communication with the AEMC is down. Full transactions and database are automatically synchronized upon restoration of communication lines

Anti-passback

- Each access reader can be assigned to an anti-passback zone and a direction (in or out)
- Global anti-passback control for 16 access readers per AEC is available

Elevator Control

- Each AEC supports up to 32 floors
- Each relay point controls 1 floor

Parts Included

Quant.	Component
1	AEC MOD CPU - CPU Board
1 or 2	AEC MOD HD1 - Access Easy Master Hard disk with OS and Applications
1	AEC MOD COM - Secure/Communication Board
1	SmartCard and License - (SIMM module)
1	AEC SER EXT - Serial Converter Board
1	AC to DC Power Supply (CE) or AC/AC Transformer
1	DC/DC Converter Board (CE) or AC to DC Power
1	AEMC Enclosure

Technical Specifications

Dimensions

Enclosure (H x W x D)	530 x 460 x 100 mm (17.9 x 20.7 x 3.9 inch)

Environmental conditions

Relative Humidity	10% to 90% at 32 ℃ (+90 ℉)
Temperature (Operating)	0 ℃ to +50 ℃ (32 ℉ to 120 ℉)
Temperature (Storage)	0 ℃ to +55 ℃ (32 ℉ to 130 ℉)

Inputs

Access reader	16 per AEC system, 320 system wide
Monitoring point	64 per AEC system, 1280 system wide

Outputs

Control points	64 control relay per AEC system, 1280 system wide

Ports

Communications ports	Two RJ45 100 Base-T-Ethernet
Modem ports	One RS-232
Bus expansion port	Two 40-pin bus expansions
Keyboard	One PS/2
Monitor	One VGA port

Controller

CPU	32-bit microprocessor 300 MHz
Memory	128 MB RAM
Storage	80 GB DIE Hard Disk (1,5 GB for OS, 78,5 GB for Storage)
Concurrent Users	24 concurrently + 1 super-user
User licenses	Max. 25 user account, SAM control Up to 8 character alphanumeric, case sensitive user Ids and passwords
Events	20.479 transaction history, stamped with date and time
Database Integrity	Encryption used for user ID and PIN
Max. Numbers of AEC	Support up to 20 AEC
Number of Cardholders	409.600 (20.480 per AEC)
Number of Access Groups	5.080 (254 per AEC)
Number of Access Levels	1.024 (2 access groups per access level)
Number of Global Schedules	255
Number of Global Holidays	32 Regular Holidays and 32 Special Holidays)

Power Requirements

Primary Voltage Input (AC)	110 VAC +10/-15% (50/60 Hz) 230 VAC +10/-15% (50/60 Hz)
Secondary Voltage Input	+5 VDC and 12 VDC for CPU board +15 VDC ±1%, for all other boards
Backup Battery (Optional Backup Battery: Not included in standard package)	12 V DC, 7 Ah rechargeable battery

Ordering Information

AEC Master Controller CE   AEC-MAS-UPS1
Access Easy Master Controller for up to 20
AEC-4W-xxx or AEC-8W-xxx with a maximum
of 320 Wiegand readers, centralized data stor-
age on hard disk, operating system with web
access, off-line processing, backup and re-
store (CE) (APR, EMEA)

AEC Master Controller FCC   AEC-MAS-UPS2
Access Easy Master Controller for up to 20
AEC-4W-xxx or AEC-8W-xxx with a maximum
of 320 Wiegand readers, centralized data stor-
age on hard disk, operating system with web
access, off-line processing, backup and re-
store. AC-to-DC Power Supply Board (FCC),
(AMERICAS)

AEC Master Controller FCC US English   AEC-MAS-P2USE
Access Easy Master Controller for up to 20
AEC-4W-xxx or AEC-8W-xxx with a maximum of
320 Wiegand readers, centralized data stor-
age on hard disk, operating system with web
access, off-line processing, backup and re-
store. AC-to-DC Power Supply Board
and
Access Easy Master Language kit, centralized
data management reports, cardholder admin-
istration and alarm monitoring, 25 remote sys-
tem administrations, CD-ROM with manuals,
installation guide, US English, (FCC), (AMERI-
CAS)

AEC Package Master Controller 4 W US English   AEC-4WMAS-P2USE
Access Easy Controller with CPU board, 4 Wie-
gand reader interfaces and door controls (8 IN/
OUT), Secure Communication board, Convert-
er board, AC to DC Power Converter Board,
AC/AC Transformer
and
Access Easy Language kit with compact flash
memory module, smart card and license, CD-
ROM with utility programs and manuals, Instal-
lation Guide, US English
(FCC) (AMERICAS)

AEC Package Master Controller 8 W US English   AEC-8WMAS-P2USE
Access Easy Controller with CPU board, 4 Wie-
gand reader interfaces and door controls (8 IN/
OUT), Secure Communication board, Convert-
er board, AC to DC Power Converter Board,
AC/AC Transformer
and
Access Easy Extension 4 Wiegand reader in-
terfaces and door controls (8 IN/OUT), fitting
Parts
and
Access Easy Language kit with compact flash
memory module, smart card and license, CD-
ROM with utility programs and manuals, Instal-
lation Guide, US English
(FCC) (AMERICAS)

Ordering Information

AEC Master Controller FCC Spanish   AEC-MAS-P2SPA
Access Easy Master Controller for up to 20-
AEC-4W-xxx or AEC-8W-xxx with a maximum
of 320 wiegand readers, centralized data stor-
age on hard disk, operating system with web
access, off-line processing, backup and re-
store. AC-to-DC Power Supply Board
and
Access Easy Master Language kit, centralised
data management reports, cardholder admin-
istration and alarm monitoring, 25 remote sys-
tem administrations, CD-ROM with manuals,
installation guide, Spanish, (FCC), (AMERI-
CAS)

AEC Package Master Controller 4 W Spanish   AEC-4WMAS-P2SPA
Access Easy Controller with CPU board, 4 Wie-
gand reader interfaces and door controls (8 IN/
OUT), Secure Communication board, Convert-
er board, AC to DC Power Converter Board,
AC/AC Transformer
and
Access Easy Language kit with compact flash
memory module, smart card and license, CD-
ROM with utility programs and manuals, Instal-
lation Guide, Spanish
(FCC) (AMERICAS)

AEC Package Master Controller 8 W Spanish   AEC-8WMAS-P2SPA
Access Easy Controller with CPU board, 4 Wie-
gand reader interfaces and door controls (8 IN/
OUT), Secure Communication board, Convert-
er board, AC to DC Power Converter Board,
AC/AC Transformer
and
Access Easy Extension 4 Wiegand reader in-
terfaces and door controls (8 IN/OUT), fitting
Parts
and
Access Easy Language kit with compact flash
memory module, smart card and license, CD-
ROM with utility programs and manuals, Instal-
lation Guide, Spanish
(FCC) (AMERICAS)

Ordering Information

Software Options

AEC Master Language Kit UK English Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, UK English, (APR, EMEA)	AEC-MASSW-UKE
AEC Master Language Kit US English Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, US English, (AMERICAS)	AEC-MASSW-USE
AEC Master Language Kit Japanese Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, Japanese (APR)	AEC-MASSW-JAP
AEC Master Language Kit Traditional Chinese Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, Traditional Chinese (APR)	AEC-MASSW-TCH
AEC Master Language Kit Simplified Chinese Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, Simplified Chinese (APR)	AEC-MASSW-SCH
AEC Master Language Kit Thai Access Easy Master Language kit, centralized data management reports, cardholder administration and alarm monitoring, 25 remote system administrations, CD-ROM with manuals, installation guide, Thai (APR)	AEC-MASSW-THA
AEC Master Controller Kit UK English Access Easy Language kit for Master with compact flash memory module, smart card and license, CD- ROM with utility programs and manuals, Installation Guide, UK English (APR, EMEA)	AEC-SW2-UKE
AEC Master Controller Kit US English Access Easy Language kit for Master with compact flash memory module, smart card and license, CD- ROM with utility programs and manuals, Installation Guide, US English (AMERICAS)	AEC-SW2-USE
AEC Master Controller Kit Japanese Access Easy Language kit for Master with compact flash memory module, smart card and license. CD- ROM with utility programs and manuals, Installation Guide, Japanese (APR)	AEC-SW2-JAP

Ordering Information

AEC Master Controller Kit Traditional Chinese Access Easy Language kit for Master with compact flash memory module, smart card and license, CD- ROM with utility programs and manuals, Installation Guide, Traditional Chinese (APR)	AEC-SW2-TCH
AEC Master Controller Kit Simplified Chinese Access Easy Language kit for Master with compact flash memory module, smart card and license. CD- ROM with utility programs and manuals, Installation Guide. Simplified Chinese (APR)	AEC-SW2-SCH
AEC Master Controller Kit Thai Access Easy Language kit for Master with compact flash memory module, smart card and license, CD- ROM with utility programs and manuals, Installation Guide, Thai (APR)	AEC-SW2-THA