

CEM Systems AC2000 Security Hub

Security and event management system



Key Features

- Centralised alarm management for Access Control, Video, Fire, Intruder and Building Management
- Advanced alarm processing capabilities
- Customisable alarm workflows
- Sophisticated alarm escalation
- Real-time graphical map display
- Oneshot and broadcast for remote opening and management of access control doors
- Dedicated video micro viewers for real-time and archived alarm monitoring
- Advanced user restrictions for multi-user applications
- Dedicated alarm pop up window
- Inbuilt system reports
- Detailed in-app reports
- Fully integrated cardholder trace
- Fully integrated guard tour events
- Configurable Map Zones
- Threat Levels indicator
- AC2000 Enterprise support, providing access to all AC2000 Local Enterprise site maps, devices and alarms

Central alarm monitoring and management

CEM Systems AC2000 Security Hub is the central alarm management platform for the AC2000 access control system. Leveraging client server architecture, the Security Hub application provides a powerful and versatile feature set, enabling system operators to configure, monitor, and control their security system. The multi-user interface provides local or multi-site monitoring of access control, video, fire, intruder, and building systems. Security Hub assists in reducing risk and cost while maximising efficiency, situation awareness, and accountability.

AC2000 Security Hub allows the monitoring and control of your site using one single unified platform which helps to keep operating costs low and ensures that alarms and events can be managed quickly and effectively.

Alarms and devices

AC2000 Security Hub has an alarm application which displays information about the type of alarm, alarm description, device address, priority level, alarm time, state, associated video, and alarm owner (for multi-user systems where more than one operator can be managing alarms). Operators can right click on any alarm and zoom directly into the device location on a graphical map, run a device report, or with the correct authorisation level isolate the device.

Device isolation allows operators to inhibit any further alarms occurring on a particular device, which is ideal for device maintenance. Operators can select any alarm and initiate the alarm processing application which will provide them with a set of instructions they must follow to acknowledge an alarm and then reset if applicable.

The AC2000 Security Hub also provides operators with a devices application which will display information about all devices connected to Security Hub such as Device Type, Device

Description, Total Number of Alarms, First and Last alarm times and information on whether an alarm has been filtered or isolated giving operators a complete view of the status of all alarms and devices in real time.

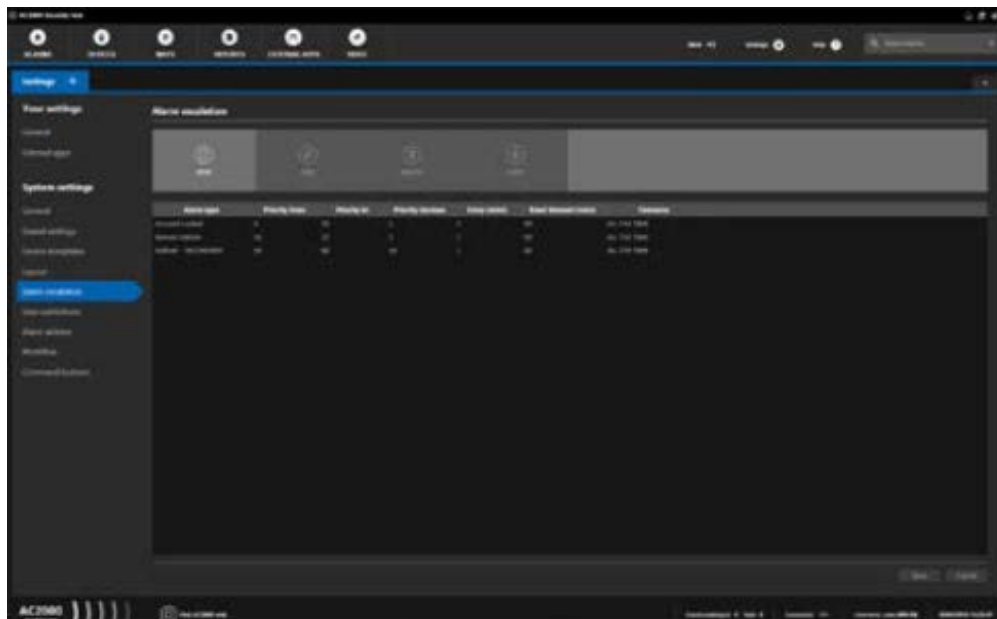
Alarm workflows

Security Hub allows system operators, who have the correct authorisation (assigned via User Options) to create a number of alarm workflows which consist of a set of instructions or actions that must be taken by the system operator before an alarm can be reset.

Security Hub workflows, once created can be saved against an individual alarm or saved as a workflow template that can be assigned to any other alarm for ease of configuration. Once alarm workflows have been created and assigned they will then be available in the alarm processing application.

Alarm escalation

AC2000 Security Hub alarm escalation is a method in which an alarm can increase in priority overtime when not acknowledged by a system operator. Alarm escalation is an important component for any security management system. Security Hub alarm escalation is highly configurable and alarms of low priority can be automatically escalated to a higher priority level if not acknowledged within a defined time period. The levels at which an alarm can increase have a user defined incremental value. The alarm escalation rules can be applied based on specific alarm types as well as time zones. The alarm escalation window is system check pointed so only operators with the correct authorisation (assigned via User Options) will be able to view escalated alarms i.e. system supervisors.

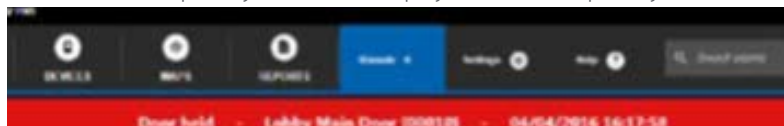


Alarm actions

AC2000 Security Hub alarm actions allows a system operator with the correct authorisation (assigned via User Options) to setup and link any system alarm from any device type and initiate a third party application and pass parameters to this application if applicable. This feature is particularly important during emergency situations such as fire evacuations. Any third party fire system that can be connected to a CEM systems device can then be used to trigger emergency muster report printouts in an available emergency situation.

Alarm priority banner

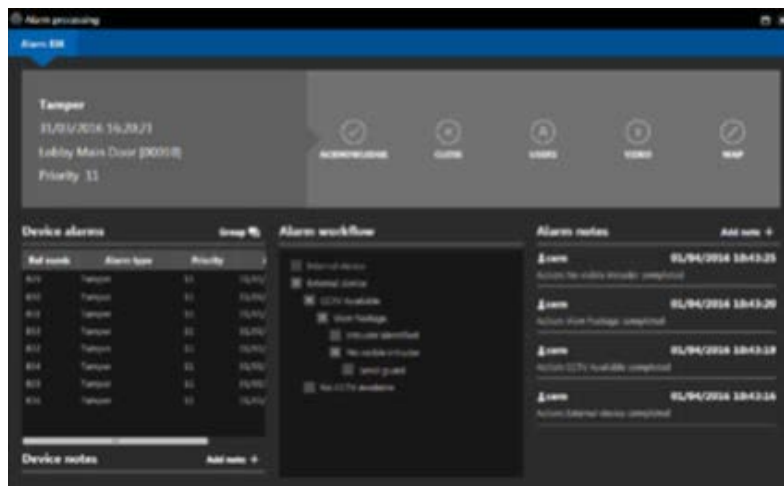
AC2000 Security Hub has a dedicated alarm priority banner across the top of the Security Hub application to ensure that system alarms deemed most critical can be processed as quickly as possible. The user has the ability to configure the alarm priority banner to display either the latest alarms first or the oldest alarms first based on their preferences. It is also possible to further configure the alarm banner so only the highest user defined priority alarms are displayed within the priority banner.



Alarm processing

The Alarm processing application is a user friendly window for system operators to view detailed information about system alarms and process these alarms in order for them to be acknowledged and reset. System operators can view multiple alarms in different tabs within the alarm processing application and will be presented with information about the alarm type, date/time stamp of occurrence, priority level and location (a map tab is available to show a snapshot of the device location on the graphical maps if applicable). Information about the devices history will display all active alarms for that device providing real-time status of the security systems alarm states. If Alarm workflows have been defined, these will also be presented to system operators all within the one active display screen.

For multi-user sites information will be available to each system operator which will detail the current alarm Owners (person who is actively processing the alarm) and also what operator is currently viewing the alarm. These operators can use the inbuilt alarm and device notes feature to send notes to each other in real time or save notes for system operator to view at a later date.



Alarm Processing

Alarm pop-up

The Security Hub application has an additional feature where a small interactive alarm pop-up window will display in the bottom right hand of the screen. This is ideal for situations where an operator is viewing another application outside of the security hub application and ensure there are multiple levels of notification with the security system.



One-shot and Broadcasts

AC2000 Security Hub provides system operators with the ability to control all system devices connected to the AC2000 system. Operators can open access controlled doors directly via device icons that can be placed on the graphical maps or launched from the Security Hub tab menu. There is also the ability to send broadcast commands which can open all or a group of doors from directly within the one unified security platform. This is ideal for situations where cardholders have forgotten their passes or in emergency situations where free access is critically required.

Video micro-viewer

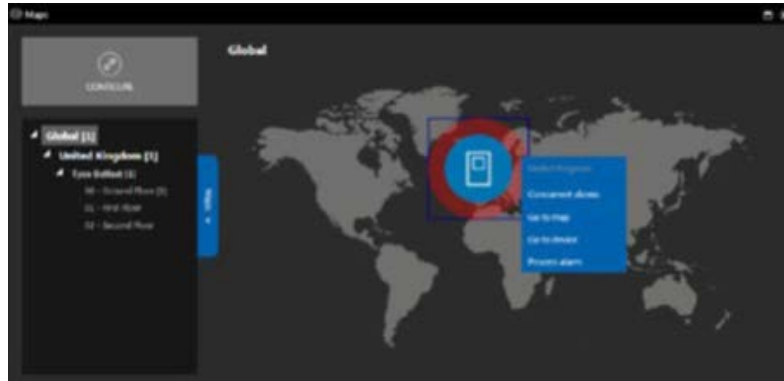
The Security Hub video micro-viewer feature allows the system operator to view live and recorded footage, simultaneously as they process alarms within the Security Hub alarm processing application. The video micro viewers can be launched via the video tab from within Security Hub or from the associated alarm processing application. If more than one camera has been assigned to an alarm or device; an option is available to select each camera view for both recorded and live viewing as required. The video micro viewers are only accessible with systems that have a fully interfaced video integration (Please contact CEM Systems for further information).



Graphical maps

Once configured, the AC2000 Security Hub Maps application displays a user friendly graphical overview of the alarms and devices contained within your security management system, detailing specific information about a device, input or alarms location.

Maps are added to Security Hub in a tree based system, comprising of overview, sites and floor maps. Each map can be nested on top of each other in an unlimited tree based structure.



Note maps can be uploaded in the following formats:

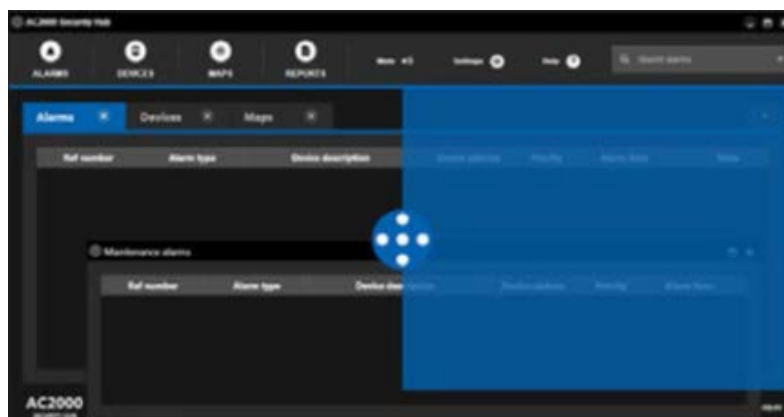
- .JPEG
- .GIF
- .PNG
- .TIF
- .BMP

Device icons and inputs can then be dragged and dropped onto their relevant location within the uploaded maps. Icons can then be configured to a specific size as required. Further to this it is also possible to define the alarm annunciation area (area that will display a flashing indication of an alarm) of each device or input icon creating a highly customisable security management system application.

Layout management

AC2000 Security Hub provides operators with the ability to open a set of applications and create floating windows that can then be grouped together into a customised screen layout across single or multi-monitored system.

The customised layouts are saved against the user and not the workstation meaning that the same layout will be presented to the operator every time they login to a client workstation. Layouts can be configured to display Maps, Alarms, Video and alarm processing in a layout that can help improve the ergonomics of the system operators.



External applications and command buttons

AC2000 Security Hub external applications features allows any 3rd party application to be added to the Security Hub window bar; providing a seamless low level interface to any 3rd party system. By providing the ability to launch 3rd party applications from directly within Security Hub it ensures system operators have quick access to key systems packages that are required for day to day operation of the security system. For example HVAC, Intelligent lighting, Video and CRM systems to name a few.

Additionally command button icons can be created and placed directly on any graphical map. This enables them to launch application and pass parameters to control 3rd party systems such as lighting, HVAC and access control doors and video systems, making it easier for system operators to control and manage the entire security system from directly within AC2000 Security Hub.

Guard tour events

AC2000 Security Hub has an inbuilt guard tour events application which displays all event and notifications of an upcoming and in progress guard tour. The information displayed to a system operator includes the guard tour name, event type, date/time, name of guard, device address and description along with the active guard tour input. Guard tours can be setup and managed from within the AC2000 guard tour application and monitored directly within Security Hub providing a single unified view of the security management system.

Trace events

AC2000 Security Hub has an inbuilt cardholder trace feature which allows a system operator to follow and track any cardholder who has been perceived to be either a threat or a possible liability to the security or the safety of the facility and people within it.

Name	Type	Event time	Device address	Device description	Outcome
ALIA TUBES	Personal	10:00	1000	Lobby Main floor	Card valid entered
ALIA TUBES	Personal	10:00	1000	Lobby Main floor	Card valid
ALIA TUBES	Personal	10:00	1000	Lobby Main floor	Card valid entered
ALIA TUBES	Personal	10:00	1000	Lobby Main floor	Card valid entered
LOF 808	Personal	10:00	1000	Lobby Main floor	Card valid entered
LOF 808	Personal	10:00	1000	Lobby Main floor	Card valid

Threat levels

AC2000 Security Hub allows the security operator to view and set threat levels directly from within the application and the current status is displayed in the main status bar.

In app reports

AC2000 Security Hub features wide range of in-app reports which provide information about alarms, alarm escalation, alarm priorities, users, device transactions, traces or version numbers. Each report can be setup and run based on time and dates, devices, alarm priorities and even users. Each report can be printed directly from within the security application or exported in either XPS or PDF formats. zones. Please note that in-app reports for device transactions, traces and version numbers are only available from AC2000 v8.0 and higher.



User restrictions

The AC2000 Security Hub application has been designed for multi-user purposes and can be highly customised and restricted based on a user's specific requirements. To allow for this the Security Hub user restrictions features allows administrators to create and assign user restriction templates that restrict access to individual site maps, floors plans, devices, inputs and also restrict access to all of the Security Hub default and user defined alarm types.

These templates can then be assigned to specific users that have been created within the AC2000 software platform. This is an ideal SMS feature were system operators are managing the security across multiple buildings, regional and global locations and ensures access to important alarm information can be controlled at a centralised level.

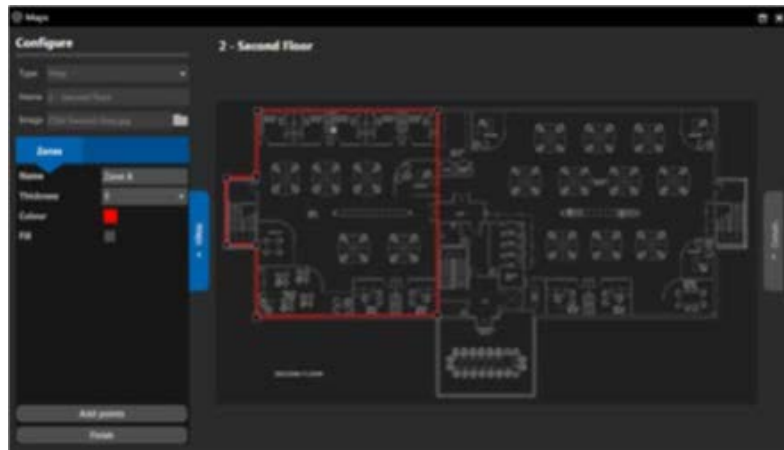
Rolling transaction display (RTD)

RTD can now be accessed and displayed with a modern and highly intuitive user interface via the AC2000 Security Hub application. RTD features a split screen view of real-time transaction outcomes and alarms on the AC2000 access control system, providing a full audit trail of transactions viewable in one window. RTD allows operators to choose how they want to view transactions with options for 'Simple List', 'Detail List' or 'Image List', along with configurable audio sounds. Doors can be opened via 'Oneshot' command once the operator verifies the cardholder access. (Available from AC2000 v8.0 Feature Pack 1)



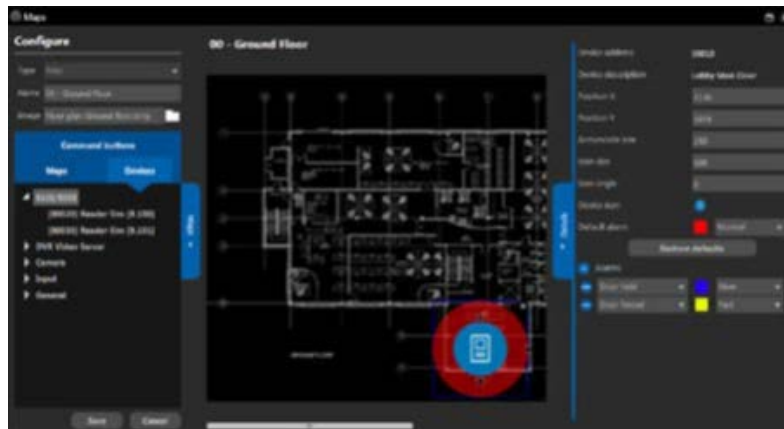
Map Zones

AC2000 Security Hub Maps allows drawing a zone in the section of the map by adding points in desired area, which in turn creates lines. Each zone can be easily adjusted by moving zone points and changing the shape of the zone. Devices can now be placed onto the maps and into the individual zones. Please note that Map Zones is only available from AC2000 v8.0 and higher.



Customisation settings

The AC2000 Security Hub application is a highly flexible and customisable application. Security Hub provides operators with the ability to use default system icons or use their own custom icons. The Security Hub customisation settings also allow operators to define an icons size, angle, annunciation area as well as a custom colour for each alarm type using an integrated colour palette. These settings can then be saved against a device template which can be used for other device configurations to reduce set up time. There is also a further option to configure custom sounds for each specific alarm type as required.



Rooms

The Rooms tab provides improved operational resource management with greater visibility of meeting resources.

The operator can view a list of rooms that have been configured in AC2000. Each room will show a colour based on the current availability of the room and gives a summary of the next booking for the room. When you right click on a specified room, the operator can view bookings for the next seven days.

Room	Booked by	Booked date	Next start time	Next end time
Conference Room	bob	2018-08-11	08/12/2018 11:59:20	08/12/2018 14:59:20
Glass Room	erid	2018-08-11	10/11/2018 11:59:24	10/11/2018 12:59:24
Sales Room	cam	2018-08-11	09/11/2018 11:58:43	09/11/2018 12:58:43

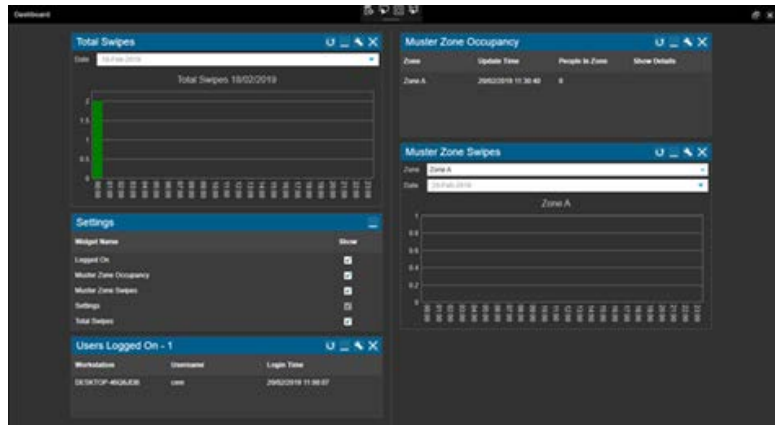
AC2000 Security Hub – Rooms tab overview

Room	Booked by	Booked date	Start Time	End time
Conference Room	bob	2018-08-11	08/12/2018 11:59:20	08/12/2018 14:59:20
Conference Room	dave	2018-08-11	09/12/2018 11:59:22	09/12/2018 13:59:22

AC2000 Security Hub – Rooms tab future bookings view

Dashboard

The Dashboard is a dynamic one-to-four column view of a set of widgets that displays system status. Widgets can be positioned using drag and drop and some have configurable settings such as refresh interval and fixed height display.



The following widgets are available in the Dashboard:

- Total Swipes – Total by hour
- Muster Zone Occupancy – Current occupancy count in the muster zones
- Muster Zone Swipes – Total in and out swipes for a muster zone on a specific day
- Users Logged On –current users logged in to AC2000
- Enterprise Health – A list of sites, the current total of alarms on each site, and if the site is currently online or offline.
- Settings – Controls which widgets are shown on the Dashboard.

Note: The widgets available can also be restricted through User Options and will vary based on the type of system configuration.

Enterprise deployments - Global Security Hub

AC2000 Security Hub can be run on the AC2000 Enterprise server, providing access to all AC2000 Local Enterprise site maps, devices and alarms. On AC2000 Local Enterprise servers Security Hub operates with the same functionality as a standard system.

Alarms can be acknowledged and cancelled at both the central and local sites and 'oneshots' can also be issued centrally from the AC2000 Enterprise server.

Monitoring and processing of alarms can be transferred from a local site to the central site outside of business hours to ensure there is 24/7 cover without a requirement for each site being manned 24/7.

Key features relating to enterprise deployments are as follows:

Alarms

The AC2000 Enterprise Server can display all alarms and maintenance alarms from all connected AC2000 Local Enterprise Server sites. Alarms can be hidden if they are below the configured priority level for the user on the AC2000 Enterprise server. An additional site column displays the name of the site the corresponding device is on.

Alarm processing

Alarms from AC2000 Local Enterprise sites can be acknowledged and reset at the AC2000 Enterprise server. Alarm and device notes are limited to the server they were entered on.

Rolling Transaction Display

A complete list of transactions and events from selected devices are displayed on the AC2000 Enterprise server. The list of devices that can be monitored, are displayed in a tree view sorted by site. Additional site information is displayed for the home site of the personnel who performed the transaction and the site relating to the device the event occurred on.

Hazard boards

Hazard boards can be configured on the AC2000 Enterprise server.

Devices

A complete list of devices from all AC2000 Local Enterprise sites can be displayed on the AC2000 Enterprise server, with an additional site column to display the name of the site of each device. The topology view displays all the devices synced up to the AC2000 Enterprise server sorted by AC2000 Local Enterprise site followed by RTC.

Visible devices

On the AC2000 Enterprise server the list of available devices to hide is displayed in a tree view sorted first by site then by device type.

Maps

All maps configured on AC2000 Local Enterprise servers are synced to the AC2000 Enterprise server. Local site maps are only configurable at the AC2000 Local Enterprise site level. Local site maps can then be placed on Enterprise maps for increased site-wide graphical visibility of events. Map zones are also synced to the AC2000 Enterprise server along with the map, device triggers and command buttons. The list of maps can be restricted to users on the enterprise server via user restrictions.

Reports

All reports function the same on the AC2000 Enterprise server as a AC2000 Local Enterprise server.

AC2000 Security Hub restrictions on AC2000 Enterprise server

For AC2000 Enterprise systems the following tab applications are not available on the AC2000 Enterprise server but are still available on the AC2000 Local Enterprise sites:

- Alarms while offline
- Alarm progression
- Guard tour event
- Trace events

Recommended AC2000 Security Hub workstation specification

Model	
Dell OptiPlex 7010 DT Desktop Computer	
Processor Type	3rd Gen Intel Core i5-3470 Processor
Processor Speed	Quad Core, 3.20GHz Turbo
Internal cache	
Standard Memory	8GB 1600 MHz DDR3 Non-ECC
Internal Hard Drive	250GB 3.5" SATA
Hard Drive Controller	NO RAID
Optical Drive Type	Optical Drive Type Optical Drive : 16XDVD+/-RW Drive
Other Drives None	Other Drives None
Monitor	17" LCD for Workstation & VIPPS, 19" LCD for Security Hub
Chassis Type	Desktop
PSU	Single

Requirements

AC2000 AC2000 Airport AC2000 Lite	V6.8/ V6.9	V7.0	V7.1	V8.0	V10.0	V10.1	V10.2
AC2000 Security Hub	–	–	•	•	•	•	•

(For other AC2000 versions please contact cem.sales@tycoint.com)

- For Graphical Maps – AC2000 Security Hub Maps License
- For Video Micro viewer – A supported video interface license

Please note: Existing AED (Alarm Event Display) customers who would like to upgrade to AC2000 Security Hub will require all existing AED configurations to be re-configured manually within the new Security Hub application.

Ordering Information

Product Code	Description
SWA2SECHUB	AC2000 Security Hub Graphical Maps Utility (Global)

To order contact cem.sales@tycoint.com or call +44(0) 2890 456 767

Related Products



- AC2000
- AC2000 Airport
- AC2000 Lite

About Johnson Controls

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For additional information, please visit www.cemsys.com or follow CEM Systems on LinkedIn and Twitter.