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New Product Announcement

CEM Systems S3050 Portable Card Reader

[Johnson Controls](#) is pleased to announce the release of **CEM Systems S3050 Portable Reader.**

The CEM Systems S3050 is a lightweight, hand-held card reading device for use with the AC2000 access control and security management system.

The S3050 can be used in a wide range of scenarios where mobility is paramount. For example, it can be used by a security guard either in a patrolling mode within predefined zones, or at fixed temporary locations where there is no power, to verify that a cardholder is authorized to be at that location and to record their presence. Other scenarios include construction sites, bus and train stations, airside/ landside boundaries, and random checks within large commercial sites.

CEM Systems S3050 Overview:

- Handheld, portable card reader.
- Cardholder Details – Stored cardholder photographs are displayed on the reader along with Name, and Date of Birth, allowing for additional visual verification.
- Mustering – The S3050 portable readers contains the current system muster state, allowing for usage in a muster situation where the muster count is decremented as each person swipes their card. (Mustering is used, for example in the evacuation of cardholders to a safe location in the event of an emergency). A report is provided which shows the details of cardholders who still need to present their card.
- Roaming - The S3050 portable readers can be temporarily assigned a different pre-defined reader address. This allows a single portable reader to be used across multiple card verification zones.
- Occupancy Mode – This allows a cardholder head count in a defined area preventing card sharing. Occupancy mode provides the ability to do spot checks on a pre-defined group of people in a defined area, e.g. a bus or plane.
- Increased Storage – The S3050 portable reader holds over 250,000 cardholder records and up to 16,000 offline transactions.

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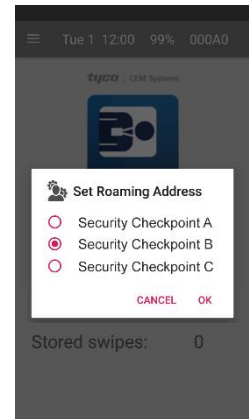
Key Features / Benefits at a Glance

Roaming

A roaming feature allows a single portable reader to be used across multiple locations/areas.

Predefining a list of several portable readers on the AC2000 Central CDC Server allows a single portable reader to be configured to use any of these addresses.

By having different virtual reader addresses in different access levels, multiple card verification zones are possible with just a single portable reader. This allows a guard to pass through different Zones, whilst always remaining in possession of the latest cardholder details for that zone.

Configuring the portable reader to use one of the predefined addresses is carried out on the actual portable reader, with no need to place the handset back into the charging cradle at the security station to initialise the new address.

Cardholder details on screen

The on-screen display shows the stored Photograph, Surname, Forename, and Date of Birth of the cardholder registered to the card that has just been read.

This allows the operator to easily and quickly verify that the details stored in the central database match the person who swipes the card.
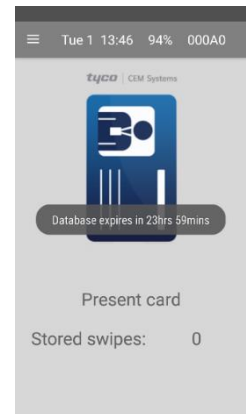
Additionally, transaction results have been added so that the full spectrum of result types are now displayed on screen with an audible tone. This allows the operator to easily and quickly identify if the card is valid, about to expire, expired, lost/stolen or not registered in the system.

Database timeout

As the portable reader transactions are mostly carried out in offline mode, it is important that the database on the handset is current and up to date. In order to maintain this, it is possible to set a timer (default set to twenty-four hours) after which the database on the handset will expire and all transactions will stop. This prevents unauthorized use of the portable reader in the event of loss or theft.

When the database expires, no transactions will be authorised until the reader is returned to the charging cradle, and the AC2000 CDC server downloads all transactions from the device and reinitializes the onboard database.

Intuitive graphical user interface

A large full colour touch screen provides intuitive, quick, and easy navigation. Information about card validity, including cardholder details (cardholder photograph, name, date of birth, and card validity) allow operators to quickly and visually verify card holder access privileges. The cardholder image display on the S3050 portable reader provides visual verification which is ideal for mustering support and minimizing the threat of card sharing.

Random Check Mode

The S3050 portable reader also features Random Check Mode which instructs operators to perform random checks on cardholders. For example, the S3050 can be configured to prompt a guard to check cardholders personal protection equipment (PPE) for adherence to company policy, or an airport might use the search prompt to manage search ratios.
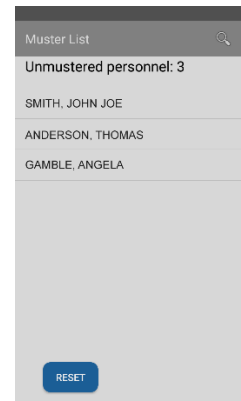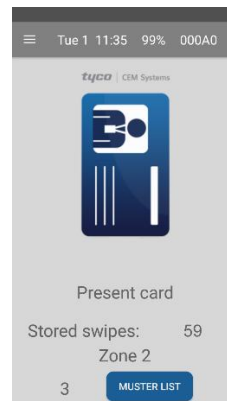
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Mustering

When defined as a muster reader, the portable reader is loaded with the current system muster state, and the total number of recorded cardholders are displayed. When cardholders swipe their card, the displayed muster count is decremented.
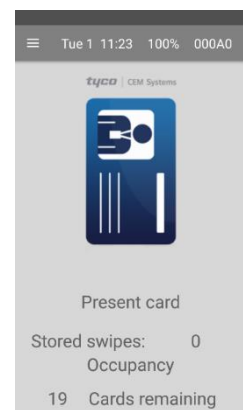
At the end of the muster, a mini report is available on the portable reader which gives the names of any cardholder who was registered as being within the zone but did not swipe at the muster reader.

This additionally allows mustering at remote locations outside of the building, without the need for an online card reader at the mustering location.

Occupancy Mode

The portable reader can be used in situations where a cardholder head counting is required. For example, this could be in a defined area which needs to prevent card sharing. Occupancy mode provides the ability to do spot checks on a set group of people in a defined area, e.g. a bus or plane.

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Typical Application Uses

The S3050 portable reader range can be used in a wide range of scenarios where mobility is paramount. For example, it can be used by a security guard either in a patrolling mode within pre-defined zones, or at fixed temporary locations where there is no power, to verify that all cardholders within a certain area are authorised to be at that location and to record their presence.

Other scenarios include construction sites, bus and train stations, random checks within large commercial sites, and securing airside/ landside boundaries within an airport environment.

Portable accessories

The S3050 portable reader comes with a power adapter, docking station, stylus pen, and hand strap. Optional hot swappable external power banks (5200 mAh) are available to extend usage of the S3050 beyond the typical battery life of up to ten hours (based on typical usage and the unit starting with a full charge).

When placed in the docking station (which is connected via Ethernet to the AC2000 system) the S3050 will connect to the AC2000 server, upload card transactions, and also receive any new or updated cardholder records automatically.

Feature	Function	Benefit
Increased Storage	Onboard memory to store details for up to 250,000 cardholders and 16,000 offline transactions.	The ability for the unit to be truly portable without the need for wired connectivity.
Cardholder Details	At card swipe, the recorded cardholder's Photograph, Name, and Date of Birth are displayed.	Provides an extra layer of security as the operator can confirm the identity of the person swiping the card with the stored cardholder details.
Mustering	Provides a portable mustering reader for evacuation/ emergencies.	Up-to-date database of all cardholders in a building. Provides real time count of all accounted for cardholders and a report of those not accounted for.
Roaming	Change the device address when moving between different zones.	Allows the Operator to move between zones, or building areas by changing the reader address without returning to base.
Occupancy	Cardholder head count in a defined area preventing card sharing.	Occupancy mode provides the ability to do spot checks on a set group of people in a defined area, e.g. a bus or plane.

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Frequently Asked Questions

CEM Systems S3050 portable reader

Q: What are the differences between the existing CEM S3040 portable readers and the new S3050 portable reader range?

A: The S3050 runs on an Android operating system with a different graphical user interface to the S3040. It also has a larger touch screen interface, can store more card details, more offline transactions, and is a more convenient form factor than the previous S3040. The features and modes are comparable on the S3050 and S3040.

Q: What AC2000 versions does the S3050 work with?

A: The S3050 Portable Reader Range operates with the CEM Systems AC2000 (Standard/Lite/Airport Edition) v7.0 software and higher.

Q: Will I need to update AC2000 to work with the S3050?

A; Yes. A patch is required and can be obtained from the CEM Systems support team.

Q: Is the database encrypted on the S3050 device?

A: Yes. The database on the S3050 is fully encrypted using strong AES256 encryption.

Q: How many transactions can be stored in the offline database?

A: The S3050 reader range has been tested to a practical limit of 16,000 offline transactions based on continuous usage, with charging over a twenty-four hour period.

Q: Will my current S3040 docking station work with the S3050?

A: No. The S3040 docking station is not compatible with the S3050 portable reader.

Q: What is the typical battery life of the S3050 portable reader?

A: A fully charged reader will provide up to ten hours of battery life based on typical usage. A snap on power bank is available from CEM Systems, which increases the battery life and use time of the reader.

Q: Is a docking station provided with the S3050 reader when ordering or does it need to be purchased separately?

A: A docking station is provided with the S3050 reader. An additional docking station can be purchased using product code MEE/305/004.

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Q: How can I purchase the S3050?

A: Please contact your CEM Systems account manager for pricing and order enquiries. Please note the S3050 readers are available on a lead time of six weeks from receipt of order for quantities of ten or less. Higher quantities may incur higher lead times.

Ordering Information

Product Codes	Description
RDR/305/001	S3050 Portable Card Reader (Prox) with docking station
RDR/305/006	S3050 Portable Card Reader (Picopass) with docking station
RDR/305/007	S3050 Portable Card Reader (MIFARE/ DESFire) with docking station
RDR/305/008	S3050 Portable Card Reader (iClass SEOS) with docking station
S3050 Spares	
MEE/305/004	S3050 Docking Station with power port, Master/Slave USB port, Ethernet port and power supply
MEE/305/006	S3050 Power Adapters kit : US – UK
MEE/305/007	S3050 External Battery Power Bank
MEE/305/008	S3050 Leather Case with standard quick release clip and webbing belt loop

For more information email cem.info@tycoint.com or contact your account manager.

vary from photos. Not all products include all features. Availability varies by region and may require certification; please verify conditions with your Regional Sales Manager.