

# emerald<sup>™</sup>

Intelligent Access Terminal



# emerald

## A world of possibilities at your fingertips

**emerald is a multi functional touch screen access terminal with fully integrated biometric\* that is revolutionizing the security industry.**

With its sleek design and state of the art LCD touch screen, emerald offers card reader and controller functionality,

fully integrated Voice over IP (VoIP) intercom and a range of remote server based applications, all in one single, powerful terminal. Designed for use with the CEM AC2000 security management system, emerald not only controls access to restricted areas but also opens up a world of infinite possibilities by bringing CEM AC2000 intelligence directly to the edge.

### Key features

- Industry's most multifunctional access terminal
- User-friendly 4.3" capacitive LCD touch screen
- Fully integrated optical fingerprint reader for biometric verification\*
- Fast card and fingerprint verification, uses 1:1 fingerprint match at the door\*
- Intuitive GUI enhancing user experience at the door
- Ethernet card reader & controller in one
- PIR motion detection
- Voice over IP (VoIP) Intercom functionality
- Support for a range of smart card technologies
- Ability to run 'Remote Applications' from AC2000 central server directly at the door
- Scramble keypad option for Personal Identification Number (PIN)
- Offline database for 250,000 cardholder records (130,000 cardholder records on TS300f)
- Multiple door modes
- Power over Ethernet technology
- Easy to install
- Advertising/Information Announcements



\*Biometric fingerprint reader on TS300f version only.

# emerald



## Intelligent Touch Terminal

**emerald has an innovative, sophisticated design. It has a touch sensitive, scrollable 4.3” capacitive custom LCD screen. With hardened glass and an anti-glare coating, it is durable enough to be used both indoors and outdoors and is IP 65 rated.**

With a built-in mini PIR sensor, the terminal also features energy saving motion detection. This enables the LCD screen to automatically light up upon an approaching person.

With an easy to read and intuitive graphical user interface (GUI), emerald displays a wide range of predefined animated messages to cardholders depending on their access privileges e.g. Wrong Door, Lost/Stolen Card, Expiring Card and Access Granted. Featuring an optional Scramble keypad for Personal Identification Number (PIN) security, emerald also acts as an information point by displaying general company information and audible prompts to enhance user experience at the door.



## IP Reader & Controller

emerald extends the traditional capabilities of an access control reader. With advanced IP reader and controller functionality in one device, emerald communicates directly to the CEM AC2000 server using Ethernet connectivity. This removes the need for an additional controller in the security system design.

With an offline database, emerald can store up to 250,000 card holder records (TS300f can store up to 130,000 cardholder records) and 50,000 card transactions in offline mode. This enables 24/7 security, even in the event of communication being temporarily lost with the AC2000 server.

With multiple door modes, emerald can be used in a variety of applications such as Control Post, Interlock Mode, Multi-Swipe mode, Entry Checklist Mode and many more. emerald also supports a range of highly secure industry smart card technologies, such as 13.56MHz Mifare (CSN) and DESFire (CSN) smart cards.

## Power over Ethernet Plus

emerald is available with onboard Power over Ethernet Plus (PoE+) technology allowing the terminal and additional door hardware to be powered using a single Cat 5e/6 cable at the door (limited power available for door hardware – please refer to emerald datasheets for more information).



## Intercom functionality

emerald features a fully integrated Voice over IP (VoIP) intercom (TS200/300/300f versions only). This provides two way point-to-point communication utilizing built-in microphone and speaker and enables users to communicate directly with security personnel when assistance is required. Using the dedicated intercom application, operators can view a list of emerald terminals on the system and choose to initiate a call directly. Access to the intercom can be restricted by cardholders and can be used as an additional layer of authentication in high security areas.





## Remote Applications - Intelligence at the door

One of emerald's unique features is the ability to run applications at the door that are remotely hosted on the AC2000 database server (TS300/300f versions only). These server based Remote Applications are secure web pages accessed from emerald via a secure web portal.

Available to users with specific cardholder status, these leading edge applications display real time information and statistics such as card status, scheduled visitors, top system alarms, most recent alarms and most recent card swipes on the terminal. Applications available include 'First and Last swipes' that can be used for time and attendance purposes, 'Your Card Details' for individuals to determine access levels and card expiry date and 'Change PIN' that allows users to proactively change their own PIN without contacting the system operator. Another key application is 'Your Visits' which allows reception and individuals to quickly review scheduled visits.

An 'Info' application also enables administrators to post general company information on the emerald terminal, such as health & safety information.

Room Booking application allows users to reserve predefined rooms for a period of time directly from the emerald terminal. Users can view the 'All Room Booking' application or use the 'This Room Booking' application, which shows bookings for the room the emerald device is assigned to.

The 'Threat Levels' application enables a preauthorized user to instantly change the AC2000 system threat level directly and securely from the emerald terminal.

## Customized Remote Application Groups

CEM is the first to market with the introduction of customized 'Remote Application Groups'. Individual cardholders will uniquely only have access to remote applications, depending on their 'Application Group' assigned. For example Administration group, Engineer group and General Company group.

## Fully integrated biometrics & access control solution

The emerald features a controller, advanced IP card reader and fingerprint module all in one device (TS300f version only) and meets requirements for three stage identity authentication (card, PIN, and biometric verification) using one device.

## PIN & Fingerprint

This feature allows using emerald (TS300f version only) without a card, where the user must enter their special designated 6-digit PIN number followed by a fingerprint verification. Where necessary, this removes the need for a physical card while maintaining a high level of security at the door.

## PIN as Card

PIN as Card is a special emerald feature, offering cardless verification using a unique 6 digit PIN to verify transactions removing the need for a physical card.

**emerald is available in four versions:**

**TS100** – Intelligent Access Terminal

**TS200** – Intelligent Access Terminal with VoIP intercom

**TS300** – Intelligent Access Terminal with VoIP intercom & Remote Applications

**TS300f** - Intelligent Fingerprint Terminal with Fully Integrated Biometric Solution

(Please see datasheets for more information)

Experience emerald today!

[www.cemsys.com/emerald](http://www.cemsys.com/emerald)



**CEM SYSTEMS**

*From Tyco Security Products*