AC2000 (RTC) Ethernet Controller

Features that make a difference:

- RTC software is required to support CEM IP based products including the emerald touch screen reader, S610e, S610f, Etherprox, S3030 portable reader range, eDCM 300 two-door Controller, eDCM 300 Input/Output Module and the EIOC (Ethernet Input/Output Controller)

- A single RTC controls up to 256 master card readers/devices

- A single CDC server can use 256 RTC's to support up to 65,536 master card readers/doors

- RTC has a complete offline database offering an extra layer of redundancy to the AC2000 system

- RTC distributes database changes to connected Ethernet readers and devices

- Ethernet (TCP/IP) connectivity to the AC2000 CDC server

The AC2000 RTC (Real Time Computer) is a software controller required for use with Ethernet based CEM readers and devices as part of the AC2000 SE (Standard Edition) and AC2000 AE (Airport Edition) access control systems.

At the heart of the AC2000 system is the Central Database Computer (CDC Server), which is based on a client-server system architecture design. The CDC server serves each of the connected client workstations and processes and stores all the alarms and transactions that occur on the system.

The RTC software provides Ethernet reader controller software which is used by CEM readers and devices to communicate with the CDC. It has its own subset of the CDC server database which it uses to communicate to the readers. The RTC is used with CEM Ethernet devices such as the emerald touch screen reader, S610e reader, S610f reader, Etherprox reader, S3030 portable reader range, eDCM 300 (Door Control Module), eDCM 300 Input/Output Module and the EIOC (Ethernet Input/Output Controller).

The RTC software can be installed on the CDC server, however when used in systems with over 256 master readers/devices, the RTC software is installed on separate PC hardware to handle system capacity.

CEM Ethernet readers and devices have their own IP address and communicate to the RTC via standard TCP/IP protocol over 10/100 Base-T.
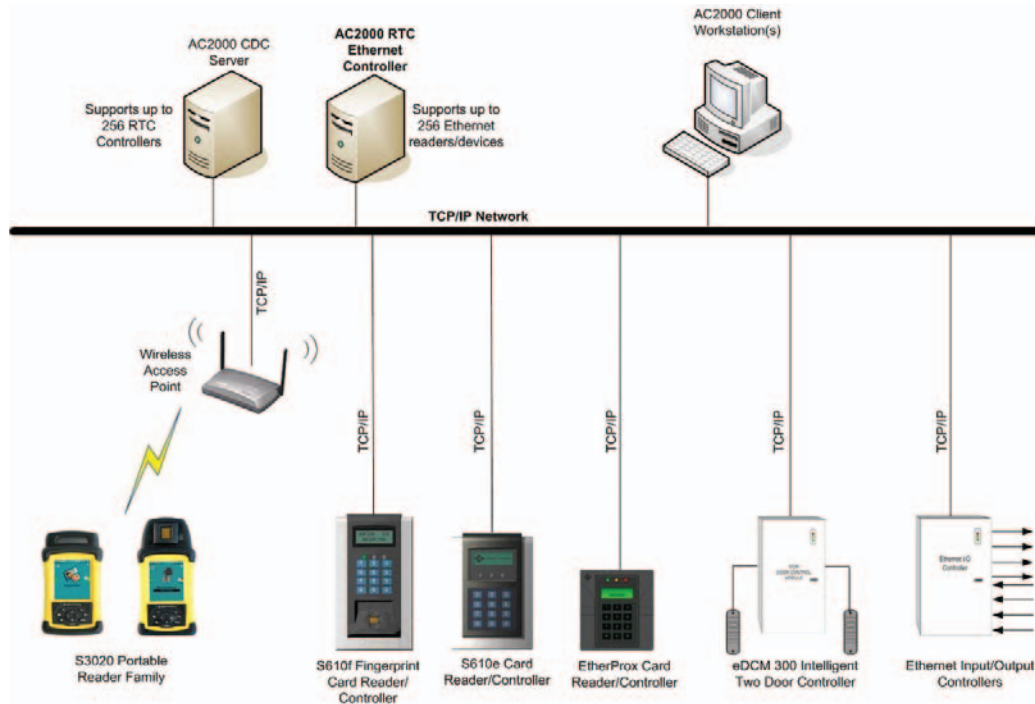
System Resilience

The RTC Ethernet software offers an added layer of system resilience as it is capable of operating independently from the central CDC server should communications between the two be temporarily lost.

All transaction information will be held on file in the RTC for onward transmission up to the CDC server once communications are re-established. Any system updates that have taken place at the CDC server during offline operation will also be transmitted to the RTC.

A large AC2000 system will utilise multiple RTC's, each connecting back to a single CDC Server. This provides a robust and reliable system, with balanced loading of access control processing and data communications.

AC2000 Ethernet System Toplogy

Figure: AC2000 CDC Server (Supports up to 256 RTC Controllers), AC2000 RTC Ethernet Controller (Supports up to 256 Ethernet readers/devices), AC2000 Client Workstation(s), connected via TCP/IP Network. Devices: Wireless Access Point, S3020 Portable Reader Family, S610f Fingerprint Card Reader/Controller, S610e Card Reader/Controller, EtherProx Card Reader/Controller, eDCM 300 Intelligent Two Door Controller, Ethernet Input/Output Controllers.

Recommended RTC PC Specification

Processor Type . . . . Intel® Xeon® 3040 Dual Core Processor
Processor Speed 1.86GHz
Internal Cache. . . . . 2MB L2 cache
Standard Memory . . . . 1 GB (2 x 512 MB)
Internal Hard Drive. . . . . 1 x 80GB, 7200rpm, 3.5inch,
                                    SATA Hard Drive
Optical Drive Type . . . . 48 x DVD ROM
Other Drives . . . . None
Chassis Type . . . . Tower
PSU. Single

Ordering Information

Product Code	Description
SWENET128	RTC – Ethernet Reader Controller SoftwareOnly (1-128 doors)
SWENET256	RTC – Ethernet Reader Controller Software Only (128-256 doors)
SWENETUPG 128-256	RTC – Ethernet Reader Upgrade LicenseController Upgrade License (128-256 doors)
SYS/101/300	RTC – Ethernet Reader Controller (PC with SWENET256 software installed)

Related Products

AC2000 SE

AC2000 AE