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Data Sheet

AC2000 CDC
Central AC2000 Server

Key Features

- A single AC2000 server can support up to 65,536 master card readers or doors
- Resilient and reliable 64-bit Linux-based operating system
- Multiple layers of redundancy
- Automated system backups
- Configurable data management and archiving
- Web based graphical user interface that ensures no previous Linux knowledge is required
- Full suite of Windows based client applications
- Fully audited system, all database changes and updates recorded and searchable
- UTF-8 database supporting multiple languages and character sets
- Hot standby failover server optional
- Supports World Time zone configuration
- Data Partitioning and Standard System
- Link supported

The central component of the AC2000 client-server system architecture is the Central Database Computer (CDC) server.The CDC serves each connected Windows-based client workstation, RTC (Real Time Computer) and AC2000 WEB. The CDC server processes and stores all alarms and transactions which occur on the AC2000 system..

The CDC server runs on CEM's own customised Linux-based operating system (OS) which is tailored for reliable Security Management application. The CDC server provides a highly sophisticated level of power and system resilience. Linux is widely known for its reliability, robustness, resilience and system uptime.

The CDC server has built-in web server (AC2000 WEB) allowing system administrators to perform server management, configuration, diagnostics and system backup operations without needing any prior Linux knowledge or extra resources.

An automated system backup process runs each day ensuring system data can be restored in the event of critical hardware failure. Multiple backup media choices are available including RD1000 high-capacity drives, removable drives and network drives. The RD1000 removable disk media offers increased portability and durability over standard USB-based hard drive storage and are small, lightweight, and can be stored off-site for disaster recovery protection. USB backups are available and are fully configurable within the AC2000 system.

Scalability
The capacity of an AC2000 system can be increased by adding additional RTC's to the AC2000 CDC Server. Each CDC supports up to 256 RTC's and each RTC supports up to 256 doors. At full capacity an AC2000 system can support up to 65,536 doors using only a single CDC server. This provides a scalable architecture for the system to be extended as required.

System Resilience
The CDC has an optional Failover server solution which can be used to create a duplicate CDC hot standby server, which can take control of the system in the event of primary server failure.

World Timezones
The CDC server can support numerous RTC's across multiple world timezones. Each RTC maintains its own localised clock, according to their geographical location. All associated devices synchronise their internal clocks to the local RTC.

The centralised CDC will store all alarms and transactions, which can be accessed via the networked AC2000 workstations. All alarms and transactions will be displayed as per the local AC2000 workstations geographical timezone.

This allows global companies operating in Coordinated Universal Time (UTC) to have full real time visibility of alarms as they occur.

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AC2000 System Topology
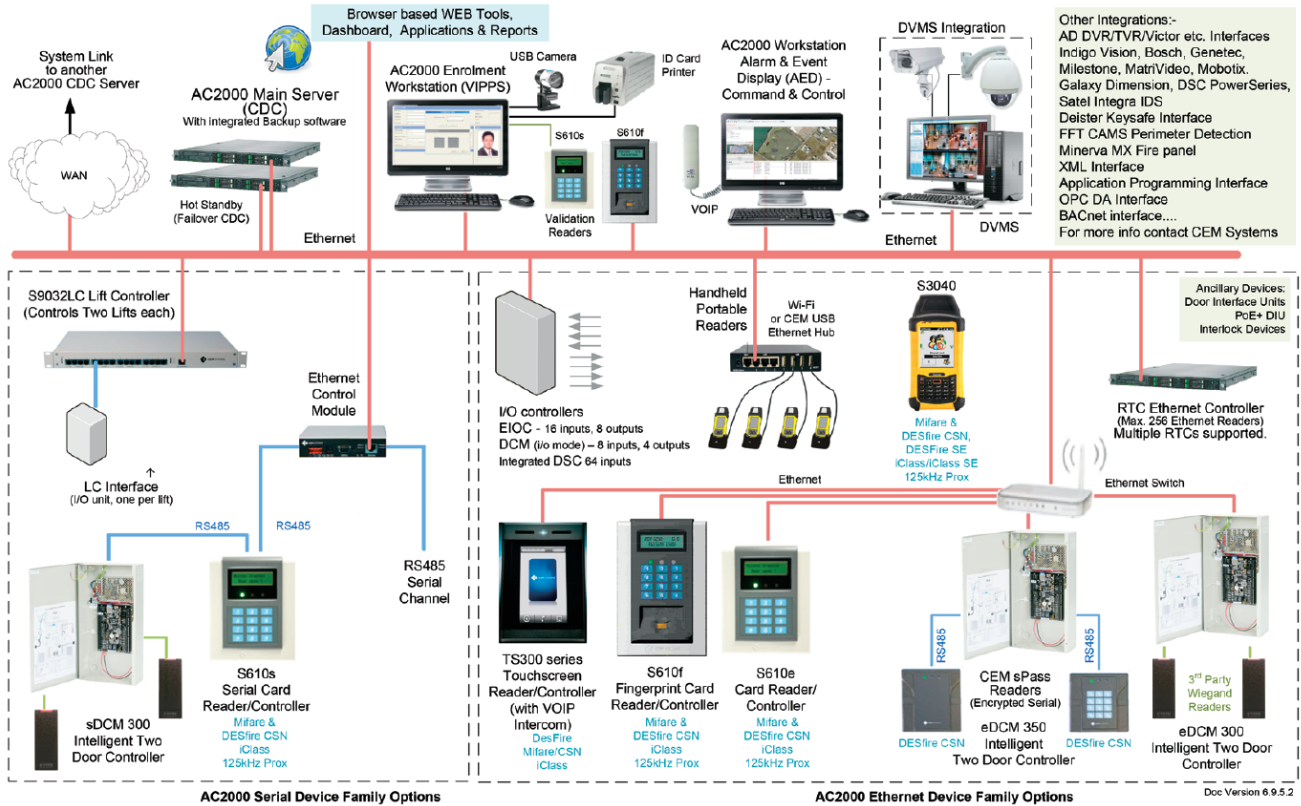
Recommended High-End CDC Specification

Processor Type . . . . Intel® Xeon® E5-2620

Processor Speed . . . . 2.26 GHz

Internal Cache . . . . 8 MB

Standard Memory . . . . .8 GB

Internal Hard Drive . . . . .4x146GB SAS 10k HD hot plug

Hard Drive Controller . . . . RAID 5 with hot-spare

Optical Drive Type . . . . 16 x DVD +/- RW

Backup Device . . . . RD1000 Removable Disk Storage

PSU . . . . Redundant power supply (2 PSU)

Recommended Minimum CDC Specification

Processor Type . . . . Intel® Xeon® 2120

Processor Speed . . . . 3 GHz

Internal Cache . . . . 8 MB

Standard Memory . . . . .4 GB

Internal Hard Drive . . . . .1 x160GB 7200rpm SATA hard drive

Hard Drive Controller . . . . No RAID

Optical Drive Type . . . . 16 x DVD +/- RW

Backup Device . . . . USB (Minimum 8GB recommended)

PSU . . . . Single

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Ordering Information

Model	Description
SYS/101/000	Server Hardware-only for RAID-1 RTC (Dell)
SYS/102/000	Server Hardware-only for RAID-5 CDC/RTC (Dell) | Server Hardware-only for RAID-5 CDC/RTC Failover (Dell)
SYS/103/000	Server Hardware-only for Tower CDC/RTC (Dell)
SYS/004/H08	Client Workstation Hardware-only (Dell)
SYS/103/032	CDC/RTC 32: Dell Tower Server Hardware, SWAC2000SE-32L software licence & RTC Software SWENET32
SYS/103/064	CDC/RTC Server 64 including Dell Tower Server Hardware, SWAC2000SE-64L software licence & RTC Software SWENET128
SYS/103/128	CDC/RTC Server 128 including Dell Tower Server Hardware, AC20000SE-128L software licence & RTC Software SWENET128
SYS/105/032	CDC/RTC 32: Dell Rack-mount RAID-5 Server Hardware, SWAC2000SE-32L software licence & RTC Software SWENET32
SYS/105/064	CDC/RTC Server 64 including RAID 5 rack mount server Hardware, SWAC2000SE-64L software licence & RTC Software SWENET128
SYS/105/128	CDC/RTC Server 128 including RAID 5 rack mount server Hardware, AC20000SE-128L software licence & RTC Software SWENET128
SYS/105/256	CDC/RTC Server 256 including RAID 5 rack mount server Hardware, AC2000SE-256L software licence & RTC Software SWENET128
SYS/107/032	CDC/RTC 32: Dell Rack-mount Server Hardware, SWAC2000SE-32L software licence & RTC Software SWENET32
SYS/107/064	CDC/RTC 64: Dell Rack-mount Server Hardware, SWAC2000SE-64L software licence & RTC Software SWENET64
SYS/107/128	CDC/RTC 128: Dell Rack-mount Server Hardware, SWAC2000SE-128L software licence & RTC Software SWENET128
A2UPG256L+	CDC Server Upgrade Licence 256+ Doors

Note: The CDC is also available as a software only package. Please contact CEM or your local sales representative for more information.

Related products

· AC2000
· AC2000 Airport
· AC2000 Lite

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

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

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