

Ruijie RG-RCD

Cloud Class Server Series Datasheet

One Cloud For Each Classroom

The Cloud Class Servers, including RG-RCD6000E V3 and RG-RCD3000 V3, are the core devices of the RCC Ruijie Cloud Class Solution V3 independently developed for classroom education. Each RG-RCD6000E V3 supports up to 60 and each RG-RCD3000 V3 supports up to 35. Teaching materials are distributed to the student devices through the network to achieve centralized education, smart management and simplified maintenance, bringing the computer room into the cloud era. With years of accumulated experience in the education industry, the Cloud Class provides a variety of education system mirrors based on different courses. With a simple one-key selection, teachers can select a wide diversity of teaching environments for the students to experience the infinite possibilities of cloud computing.

HIGHLIGHTS

- Ultimate Cloud Performance
- High-Efficiency 1080p HD Screen Sharing
- Centralized Classroom Management
- Interactive Workspace

The innovative application value and technical advantages of Cloud Class Servers, including RG-RCD6000E V3 and RG-RCD3000 V3 in the computer room environment will bring a new round of reshuffle to the informatization construction of the computer rooms in school campus. Currently the cloud desktop technology is emerging rapidly, especially in the education sector. It is a common belief among the clients in the education sector that the technological innovation can enhance teaching efficiency and will become an inevitable trend of future development.



RG-RCD6000E V3
Cloud Class Server



RG-RCD3000 V3
Cloud Class Server

PRODUCT FEATURES

Ultimate Cloud Performance

High-speed User Experience

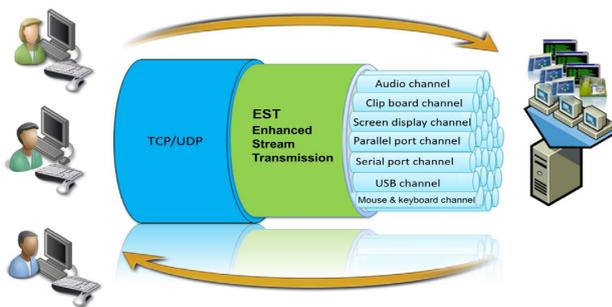
The RG-RCD Cloud Class Server Series adopts a number of innovative technologies, most notably the CDA (Cloud Desktop Acceleration) and the Appturbo technology, which integrate with Ruijie's caching technology accumulated over the years to achieve mirror startup acceleration and IO acceleration. It significantly enhances the operating speed of cloud desktop startup and applications, offering better user experience than other products in the market. With the acceleration technology of the Cloud Class Servers, it only requires a few minutes for startup of up to 60 virtual machines. The startup and operating speed of common teaching software are enhanced by 200%, allowing students to enjoy high-speed cloud performance.

Optimized Video and Audio Playback

The innovative technology EST (Enhanced Stream Transmission) of the RG-RCD Cloud Class Server Series, developed by Ruijie's R&D experts, is a virtual desktop transmission protocol that only requires very few resources to achieve high-performance data transfer. The protocol not only supports graphic display output, keyboard input, user interface device and cursor movement, but also specifically optimizes the quality of video decoding and high-quality audio restoration to present users with a lifelike high-resolution world.

Feature highlights of the high-performance EST include:

- Accelerated 2D graphics rendering
- Smart graphics compressions, which adjusts the graphics quality according to the network bandwidth
- Intelligent end device recognition, featuring a smart adjustment of graphics quality according to the resources of Cloud Terminal for the optimal user experience
- Soft decoding of media stream to ensure a high-resolution playback of video and audio files (smooth playback of 480p videos)
- Hard decoding of media stream to ensure a high-resolution playback of video and audio files (MJPEG and 1080p)
- Hardware acceleration of the end device mouse
- Re-direction of peripherals
- Encryption of all data transmission through EST including graphics and other data to ensure security



EST (Enhanced Stream Transmission) of the RG-RCD Cloud Class Server Series

Unprecedented Reliability

The Cloud Class Server Series took multiple advanced researches and customer surveys before its launch. This equipment completed a steady operation for more than 300 days at Ruijie Pressure Testing Laboratory, and also devised many application environments for customer testing in Beijing, Kunming, Guangzhou and Xi'ning, where the customers have once again strengthened the good reputation of Ruijie products and ensured a successful launch of the RG-RCD Cloud Class Server Series.

Intelligent Mirroring with One-key Selection

Customized Mirroring

The innovative technology of the RG-RCD Cloud Class Server Series, IIM (Intelligent Image Management), reassembles and encapsulates different application software into different course images to provide flexible switching between different courses. The IIM can eliminate many performance problems incurred by installing too many applications, such as system bloat, slow operation, conflicts between software and heavy loads due to examination environment switching. Meanwhile, the virtual machine images will be restored automatically after class so that any modifications to the files will not be saved. This will protect the server against the invasion of computer virus without the need of complex configuration of Ghost or other recovery cards. IIM uses limited resources to create unlimited values, delivering high-quality mirroring.

Simplified Management

The RG-RCD Cloud Class Server Series assigns 3 different user interfaces to teacher, student and administrator. Students will obtain similar experience with Cloud Class as that with a physical server. Teachers can choose different course images and manage the classroom only with one button, significantly increasing teaching efficiency. Administrators can monitor the RG-RCD equipment anytime with a web browser, which clearly shows the visualized dynamics of CPU, memory, storage and network load.

One-key Control

The teacher system of the Cloud Class Server software adopts one-key management to eliminate teachers' concern of the complex IT operation. Just with one button, a high-performance cloud teaching experience can be delivered. The administrator does not have to worry over the complicated commands. With the graphical user interface provided by the RG-RCD Cloud Class Server Series, you just need one button to create, edit and restore any graphics on the virtual machine. The RG-RCD Cloud Class Server Series enables users to enjoy the cloud experience with simple operations.

Outstanding Cost Efficiency

Advanced Design

Integrating the top-level processor, industrial-grade storage, mass memory and powerful Cloud desktop software into a compact and robust all-in-one enclosure, the RG-RCD Cloud Class Server Series achieves a revolutionary innovation. With its brand new craftsmanship and outstanding innovative concept, the RG-RCD Cloud Class Server Series offers sparkling performance compacted in a small size.

Investment Protection

The RG-RCD Cloud Class Server Series adopts centralized computing and does not require any computing resources from

the Cloud Terminal. The old PCs, which traditionally would have been replaced due to the outdated features, can be used as display output to restore vivid images. The lifespan of the computer equipment will be prolonged thereby. The RG-RCD Cloud Class Server Series not only allows the old PCs to be reused, but also ensures high performance with lower resources. The scalability of the cloud technology largely eliminates the problems brought by upgrade or expansion. In collaboration with the Cloud Class Cloud Terminal, the plug-and-play and simple deployment of the RG-RCD Cloud Class Server Series enables clients to expand the scale of computer classrooms at ease.

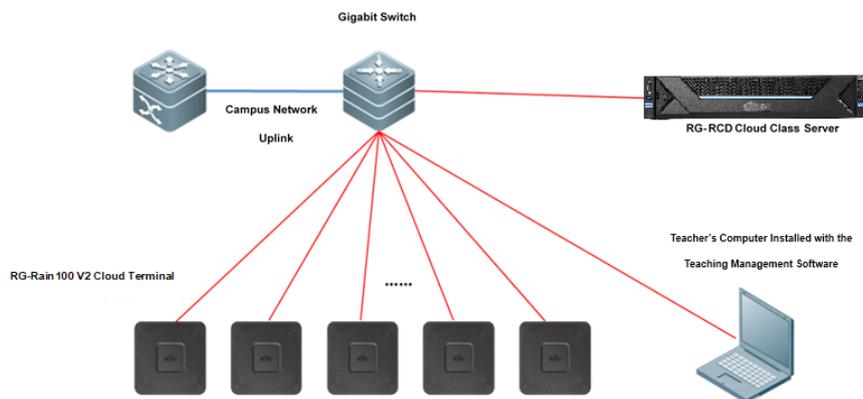
TECHNICAL SPECIFICATIONS

Model	RG-RCD6000E V3	RG-RCD3000 V3
Chassis	2U standard server chassis	
Processor	2*Xeon E5-2678 V3	2*Xeon E5-2620 V4
Memory	6*16G DDR4	4*16G DDR4
Storage	1TB SATA3 + 720GB SSD	1TB SATA3 + 240GB SSD
GE Port	2* 1000M	
COM port	1	
USB port	4 * USB2.0	3 * USB2.0
Expansion slots	8	6
Dimensions (W×D×H) (mm)	448 X 760 X 88 (Excluding the width of chassis handles)	445 X 740 X 88 (Excluding the width of chassis handles)
Power Supply	AC 100~240V, 50~60Hz, 750W	AC 100~240V, 60/50Hz, 550W

TYPICAL APPLICATION

Cloud Class Deployment (up to 60 student computers per classroom)

1. Deploy the RG-RCD Cloud Class Server Series in the classroom
2. Deploy the Ruijie Gigabit switch, connect to the Cloud Class Server and the teacher PC
3. Deploy up to 60 RG-Rain100 V2 Cloud Terminal and start the Cloud Desktop for teaching



ORDERING INFORMATION

Model	Description
RG-RCD6000E V3	The Cloud Class Server, with Xeon Processor E5-2678 V3, 2.5GHz 12 core, 24 thread, oxidation-protected PCB, built-in virtual platform of Cloud Class, provide multiple virtual desktop teaching environments, support cluster deployment, centralized management of multi-classrooms and switching between multiple teaching environments. (Support up to 60 virtual desktops)
RG-RCD3000 V3	The Cloud Class Server, with Xeon Processor E5-2620 V4, oxidation-protected PCB, built-in virtual platform of Cloud Class, provide multiple virtual desktop teaching environments, support cluster deployment, centralized management of multi-classrooms and switching between multiple teaching environments. (Support up to 35 virtual desktops)
Related Solution Components	
RG-Rain100 V2	Cloud Class End Device with built-in Cloud Class student system and low-power high-performance x86 processor. Support 1 HDMI port, 1 VGA port, 5 USB 2.0 ports, 1 USB 3.0 port, 1 10/100/1000M Ethernet port, VESA Mounting Interface Standard and standard Kensington lock.
RG-Class Manager Rainbow-License70	Cloud Class Multimedia Teaching Management Software Rainbow, a new architecture design including assignment storage, support screen broadcasting, student monitoring, document distribution and other common teaching features. Support online upgrade and teaching application expansion. Contain software and licenses of 70 Cloud Class Cloud Terminal. (1 set of software license is required for each Cloud Server for standalone deployment.)

