

Remote control system for X-Ray machine



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Product Description

The Remote Control System (RCS) consists in a hardware solution to remotely control x-ray machines through special KVM devices that will guarantee full access to any PC attached that can provide a video output and a mice and/or keyboard input.

The RCS allows authorized users to monitor and access computers located, for example, inside x-ray machines from remote locations. It connects to the internet/intranet, LAN or Wan using standard CAT5 or higher cable, or to an analogue telephone line (requires modem), and then uses a KVM cable to connect to a local KVM switch or server (an all-in-one solution is also available). The RCS's remote access and control software runs on its embedded processor, so there's no interference with server operation, or impact on network performance. RCS is independent from the particular O/S used in the controlled hosts since there is no interaction with the operating system and no software must be installed. Using RCS the remote user will be able to take full control of the remote computer up to the BIOS level.

The RCS equipment uses its web browser to remotely control the local computer, then all remote user needs is the browser installed on his PC. Either http or https encrypted protocol are implemented. We recommend linking the RCS network to the customer intranet in order to use their efficient network security measures.

Remote control via a network connection is nothing new and software-only solutions (TeamViewer, Remote Administrator, VNC...) to facilitate this are commonplace. However, they all present two major drawbacks: a) Special software must be used on all of the computers involved, especially the host, and b) if that host ceases to operate, the remote user is powerless to intervene.

The RCS is different, the computer to monitor can run its usual operating system completely unchanged and needs only to be connected (via its keyboard, video and mouse ports) to the compact RCS box.

It is this external connection to RCS box that keeps the remote user in control. Even in the midst of a system crash, the remote user can still view the host's condition as if sitting next to it.

Additionally, using the power switch option, a host system can be remotely rebooted, no matter how badly it has locked-up.

Power Switch option consists in remote control of power of up to 8 connected devices per single Power Switch equipment. It provides authorized remote users with the ability to switch electrical devices via TCP/IP or serial, controlling the power to multiple servers, workstations, hubs, switches, routers, or entire x-ray machine, allowing reboots and power-on and off functions using command line (useful for Linux/Unix based computers without graphical interface) or via a simple web browser. Power Switch allows to switch one or all outlets and to program switch cycle individually with delay (1 sec - 10 hours) for each port. The RCS really starts to excel when it is hooked to a suitable KVM switch or it is used the all-in-one solution. Then, its robust, secure and adaptable operation is available across a multitude of x-ray machines.

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IP network/Internet

The IP port allows direct connection to an Ethernet-based local network and from there onto the wider Internet, as required. Alternatively, the robust security system will allow direct connection to the outside world.

Four simultaneous remote users

The RCS box can support four remote users at any one time. All of these may be connected via the IP network port or one may be linked via the modem/ISDN channel.

Modem/ISDN port

This port offers a connection option that can be used alongside, or instead of, the IP network link. It also offers a backup route should the network fail.

Local user

The console port allows control of the system(s) by a keyboard, monitor and mouse connected directly to the RCS box.

One host or many

On its own, the RCS box provides remote access to one host computer system or up to 16. However, when linked to a suitable KVM network designed ad hoc, the remote user(s) can easily control a multitude of systems (up to 128) from one single point of access to Internet/Intranet. Alternatively it is possible to use more RCS boxes to control specific areas, for example one for the HBS of a domestic airport terminal, another for the international terminal, and another one for the passengers terminal.

One of the computers connected to the RCS box can also be set up for remote mass storage via a USB connection. Files can be uploaded to the RCS box, which the host computer 'sees' as virtual drives. This means the remote user can remotely install software, drivers etc. without the need to be sat in front of the host computer. This "drive redirection" feature allows the host system to access the CD-Rom drives, hard drives, floppy drives etc. on the client PC.

Advantages

The RCS offers a wide variety of advantages either when installed in large airports with numerous x-ray machines or when used for one single machine located in a remote site. It offers the possibility to optimize the quantity of service engineers by reducing the number of visits. When to fix a machine fault is enough a simple reset or when the problem is not hardware related and the problem could be resolved by interacting with the machine simply by using local PCs, RCS is the most efficient and cost effective solution.

Customers that have a service contract in place always expect that a machine fault is fixed as soon as possible, but anyway with a single visit. Unfortunately many times it is necessary to attend the broken machine twice, because it is not possible to diagnose the problem before "seeing" the machine and troubleshooting the broken part. Using RCS it is possible a remote diagnosis to identify the possible cause of failure and fix the problem with a single visit replacing the part broken.

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RCS offers the possibility to respond to a service call from a customer within few seconds, so that it can be guaranteed a shorter response time and in certain circumstances eliminate the need of dedicated engineers on site for a specific customer.

On the x-ray machines where a software maintenance is required RCS allows to perform it from the office or from anywhere else Internet can be accessed, at the most convenient hours for the customer. Also a daily check of certain machines that might need special attention can be easy done.

On Cruise ships that have x-ray machines aboard, a service call can be performed even while on the sea, a far as a network connection to Internet is available.

Technical Specifications	
RCS Box	Power Switch
<ul style="list-style-type: none">❖ Provides access to your remote host, KVM switches and servers over the LAN, internet or telephone line (requires modem)❖ Integrates into almost any existing KVM configuration that uses standard PS/2 keyboard/mouse and VGA monitor signals❖ Provides connection for a local KVM console❖ Supports BIOS level access❖ Remote storage support - USB connection allows virtual storage devices to be set up on the host and accessed from the client❖ Advanced security features with up to 155 users and 155 administrator accounts❖ Supports up to 15 simultaneous remote users❖ High-resolution video support: 1280 x 1024, 1600x1200 via virtual desktop mode, 1600 x 1200 for the local console❖ Video auto calibration❖ Compatible with PS/2 mice and keyboards❖ Automatic fast mouse synchronization❖ 16 definable hotkey shortcuts❖ Modem and 10/100Base-T connections for dial-up and IP access	<ul style="list-style-type: none">❖ 1 up to 2 IEC input sockets (230V AC, 2300VA), 1 up to 8 IEC output sockets (10A max per socket, 10A max over 4 sockets)❖ All outlets can be switched together or individually❖ Supports worldwide access via your LAN/WAN❖ Allows 2 phase AC input to support redundant power supplies❖ 10Base-T LAN Interface: RJ-45 network connection❖ DHCP support or fixed IP selectable❖ Individually programmable switch cycle with delay (1 sec - 10 hours) for each port❖ Automatic log out after user definable period (20 sec - 1 hour)❖ Power switch status retained during power interruption❖ Status LEDs: Power and Link/Activity for each outlet❖ Can be mounted vertically in a rack

Con riserva di modifiche e miglioramenti

LABORATORI DI RICERCA riconosciuti "Altamente Qualificati" con decreto D.M. 9-10-1985 - L.46/82 art.4

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