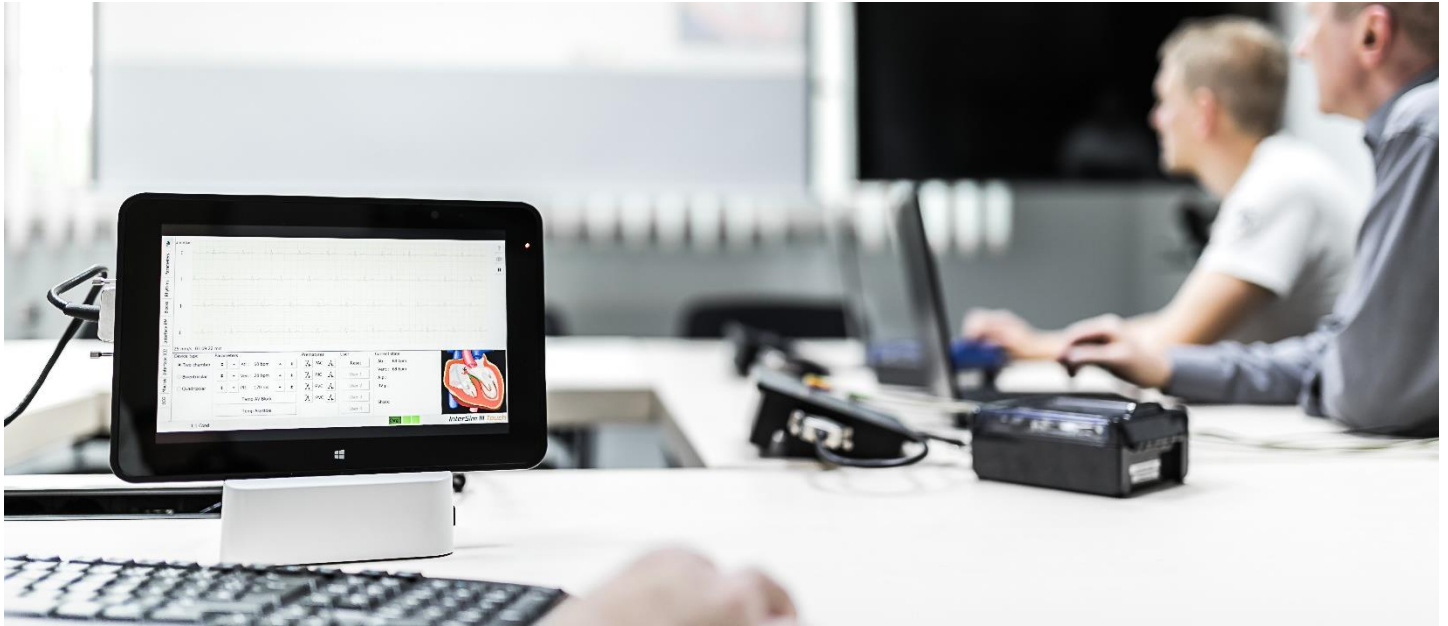


InterSim[®] III Classroom

Interactive Heart Simulator

Your virtual patient.



InterSim III[®] Classroom is a special operating mode based on patient simulators working together in a network. It is designed to learn and train the electrical and electrochemical properties of the human cardiac system and the interaction with implantable pacemakers and defibrillators more intensively than would be possible in individual operation.

In this operating mode, the trainer has the opportunity to set special tasks for the course participants without being distracted by the technical configuration of the simulator. This allows each course participant to concentrate on the virtual patient and the solution of the task without getting unwanted hints on the solution. This intensifies the training effect and makes the training more efficient.

TYPES OF INTERSIM[®] III CLASSROOM

You can choose between the Web Classroom and the Local Classroom.

▶ InterSim[®] III Web Classroom

Web Classroom is preferred for remote sessions (e.g. participants in the home office)

▶ InterSim[®] III Local Classroom

Local Classroom is preferred for fixed (e.g. seminar rooms) or temporary installation (e.g. rented conference rooms in hotels).

Note: A simultaneous mixed usage between both classroom types is not working.

KEY FACTS

- ▶ Local and web solution are available
- ▶ Each InterSim[®] III can be part of a Classroom by software update
- ▶ InterSim[®] III Touch and InterSim[®] III Interface can be combined in a Classroom
- ▶ Classroom functionality is provided by the simulator software kernel
- ▶ Unlimited number of trainees in Web Classroom / Up to 20 trainees in Local Classroom
- ▶ Classrooms can be built dynamically

NETWORK REQUIREMENTS

- Each InterSim[®] III Touch needs a docking station
- Dynamic address configuration by DHCP
- Traffic restrictions for undisturbed classroom communication recommended for low latency (e.g. Windows update, Mail / Data sync / Internet access)
- Separated network segment for classroom with common address space for all network devices (only for Local Classroom)
- Communication over the HTTPS protocol (only for Web Classroom)
- Copper cabled Gigabit Ethernet or Wi-Fi connection
- Administrator privileges are required for software installation

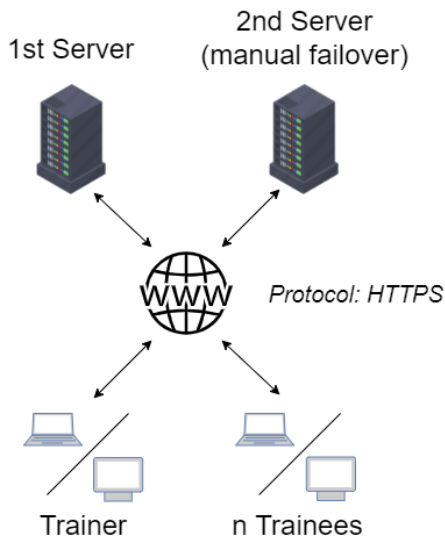


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INTERSIM® III WEB CLASSROOM



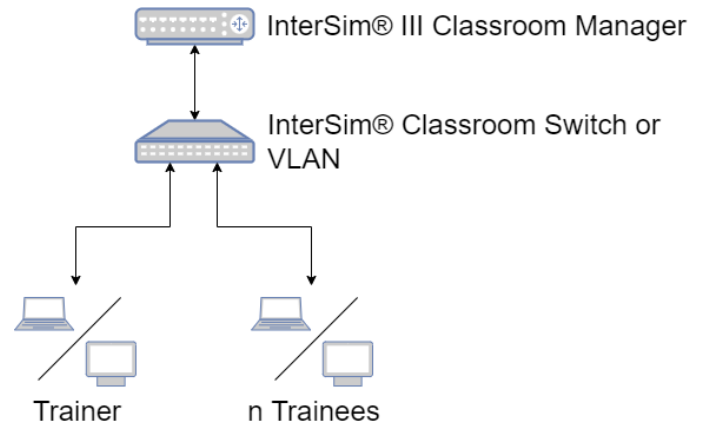
In the Web Classroom, the InterSim® III trainer and trainee devices are connected to an online server. The heart parameters and activities are transferred to the online server. The trainee PCs/laptops (for InterSim® III Interface) or touch systems (for InterSim® III Touch) catch up these parameters and activities from the server and present them to the trainee.

You are completely independent where the trainer and the trainees are located with their InterSim units. You only need an internet access. The data transfer is done over HTTPS protocol and ensures that the network requirements for your IT infrastructure are very low. In addition, the servers (located in Germany) offer a high level of data protection and fail-safety.

The Web Classroom offers several advantages. Next to the free choice of where the participants are located, it is highly flexible and there is no limitation of users in a training session. Each participant who gets the session ID can join the classroom session.

The session IDs are valid for one year after purchase and they can be used for 28 hours after first session start.

INTERSIM® III LOCAL CLASSROOM



In the Local Classroom, the InterSim® III trainer and trainee devices are connected together via a local Classroom Switch. The heart parameters and activities are transferred to max. 20 trainee PCs/laptops (for InterSim® III Interface) or touch systems (for InterSim® III Touch).

For Local Classroom you need no internet access and you can install it completely independent from your IT department. For networking, the PCs respective touch systems are connected via Ethernet (cabling done by customer) or Wi-Fi (access point to be provided and established by customer). A Classroom Switch with special configuration is used for structured cabling. A specially configured Classroom Manager handles address assignment and the provision of other services in this network.

Alternatively, the InterSim devices also can be directly included in your company network. Therefore the classroom devices only have to operate in a separated network segment. This can be assured by a configuration using VLAN technology. Broadcasts should be allowed in this network segment.

Needed Classroom Manager and Classroom Switch devices are included in the Local Classroom Package.



InterSim[®] III Classroom



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Your virtual patient.

DEVICES IN CLASSROOM NETWORK

InterSim[®] III Touch devices have to be attached to network by using the docking station. InterSim[®] III Interface requires a computer to operate the simulator software and control the interface. This computer provides connectivity to classroom network.

▶ InterSim[®] III Trainer Device

Both available InterSim[®] III variants are able to be operated in classroom trainer mode.

For Local Classroom only: For using a Touch device as trainer, a special software is required (has to be installed by the manufacturer).

▶ InterSim[®] III Trainee Devices

Both available InterSim[®] III variants are able to be operated in classroom trainee mode.

▶ InterSim[®] III Classroom Manager (for Local Classroom only)

The Classroom Manager is a router device (Mikrotik hEX) providing the performance and special services needed to operate the Local Classroom network. It also manages network addresses via DHCP for the classroom network.

▶ InterSim[®] III Classroom Switch (for Local Classroom only)

The Classroom Switch is for structured cabling of devices in the Local Classroom network. It is the central connection interface for the Classroom Manager, the master device and all slaves.

SYSTEM REQUIREMENTS FOR TRAINER PC

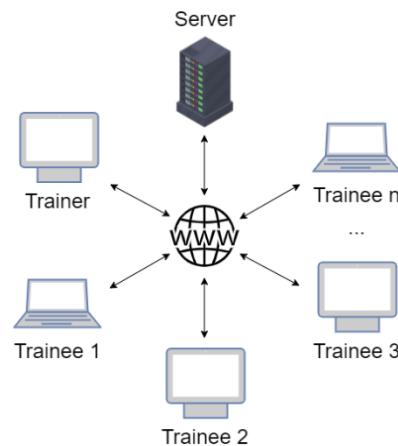
When using an InterSim[®] III Interface as trainer device, the trainer PC, laptop or notebook has to meet the following minimum system requirements:

- 2 GHz clock frequency or higher (Intel i5/i7 or equivalent AMD)
- 4 GB RAM or higher
- USB 2.0 Hi-Speed port
- Microsoft Windows[®] 10 Pro or Enterprise (64 bit)
- At least 30 MB installation space (only for simulator software)
- Display device with a resolution of 1280x720 or higher ('True Color' or 'High Color')
- DirectX 10 (or above) installed
- Administrator privileges are required for installation (special port release)

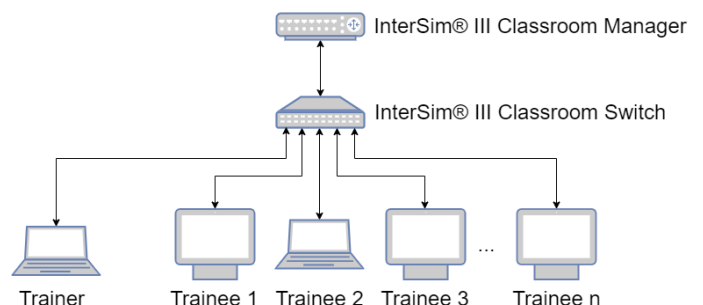
Note for Local Classroom: The processor load depends on the slave quantity because of the varying database access. It is recommended not to run processor intensive tasks in parallel to the InterSim[®] III master application.

APPLICATION EXAMPLES

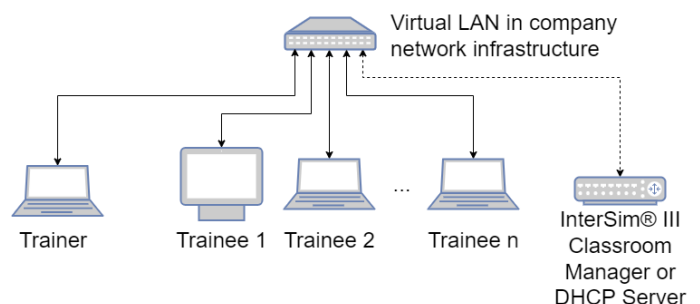
Web Classroom with InterSim[®] III Touch as Trainer



Local Classroom standard application with InterSim[®] III Interface as Trainer



Local Classroom as subnet of a company network with InterSim[®] III Interface as Trainer



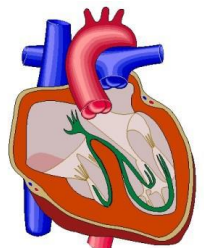
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 InterSim[®] III is a joint venture product between Ingenieurbüro Lang and TQ-Systems GmbH. Production, sales and service for the product is carried out exclusively by TQ-Systems GmbH.

