TEGRIS: The one-stop solution for OR integration

Committed to helping hospitals enhance their workflows and improve patient outcomes: Maquet is one of the world’s leading providers of medical products for operating rooms, cath labs, and intensive care units. The company is made up of three divisions: Cardiovascular, Critical Care and Surgical Workplaces. A one-stop provider of complete operating suite solutions, Maquet stands for innovation and technological progress. It is a subsidiary of the Swedish Getinge Group, a publicly traded company.

Meeting real-world OR integration needs: developed on the basis of extensive experience gained in hospitals around the globe, the TEGRIS solution from Maquet unites video routing, recording and transmission, data management, device operation and more in a single, user-friendly unit. Allowing hospitals to boost efficiency, enhance patient safety and create seamless workflows.
The entire OR at your fingertips

From cameras and monitors to operating tables and lighting systems, the award-winning user interface TEGRIS allows OR staff to operate practically every element of the operating room at the touch of a button. From a single, user-friendly interface, they can track workflows, access patient databases, stream video within the hospital or to an external location, adjust room heating or ventilation – and much more. The graphic below shows the impact TEGRIS can have on your OR.
Enjoy music and communicate via audio and video.

Adjust heating, ventilation and air conditioning.

Route any video signal to any monitor in the OR. Overlays provide additional patient and status information, improving patient safety and workflows.

Record up to two HD video streams simultaneously, such as an OR light camera and endoscope – then archive the data in the digital patient folder or PACS.

Change the position and movement of the OR table.

Exchange patient data with your hospital information system and display the patient’s history in the OR.
The benefits of TEGRIS

The surge in high-tech medical devices, the increasing importance of digital imaging and videos in surgical practice, the growing focus on documentation and communication: these developments have revolutionized the OR in recent years. But this highly complex environment presents its own challenges. Seamlessly integrating diverse technologies is not always easy. A user-friendly system for managing inputs and outputs is vital in order to minimize errors and enhance efficiency.

TEGRIS addresses these challenges. Developed to meet realworld needs, this modular offering delivers unparalleled functionality for OR integration and operation. Thanks to a highly intuitive user interface, surgeons and staff have the entire operating room at their fingertips. Video inputs can be recorded from a range of sources – and visuals can be displayed, saved or streamed at the touch of a button. Integration of data from the HIS and PACS is seamless and simple. Users can easily adjust the settings for operating tables, surgical lighting and other devices. And by integrating checklists into OR workflows, TEGRIS enhances patient safety by eliminating the need for manual data entry.

The benefits at a glance:
- Simplify workflows and boost efficiency: highly intuitive user interface supports OR processes
- Enhance patient safety: direct access to accurate patient data, integration of surgical safety checklists, simple operation of the entire OR
- Integrates with existing systems: software is compatible with a broad range of standard formats and is open, enabling operation with third-party products such as endoscopy devices
- Protect your investment: the modular system can grow with your needs
- Improve communication and collaboration: stream footage live from the OR to lecture halls, conference rooms or doctors’ offices

TEGRIS integrates all input and output sources into one intuitive control panel.
Key features

Video over IP
- Uncompressed video distribution within the OR
- High-resolution imaging, near-zero latency and real-time communication
- Increased number of video sources and destinations
- Plug and Play
- Communication and content sharing inside and outside the OR
- Future-proof system design
- Auto-detection of imaging devices
- Easy universal single-port connection

Integration of Aesculap Endoscopy
- Full integration of the endoscopy tower
- Innovative solutions ‘Made in Germany’
- Intuitive user interface
- Centralized operation
- Enhanced ergonomics
The elements of the TEGRIS user interface

Award-winning, intuitive, user-friendly

**Header:**
- All key patient data is clearly displayed at all times
- More information can be accessed by simply tapping the patient’s name
- In addition, patient data overlays can be displayed on all monitors
- Additional features include clock and stopwatch

**Content:**
- Latest touchscreen technologies for crystal clear user interface display
- Screen colors are intentionally muted to avoid unnecessary distractions
- Whatever function is selected, the user interface remains highly intuitive

The user interface is available in various languages
Manual access:

- All system functions are right at your fingertips, whether or not they are configured in your workflow
- Intuitive system of pictograms and drop-down menus allows you to rapidly find and access what you are looking for

Quick access:

- By simply tapping the button, you are taken directly to the corresponding function
- Allows you to rapidly access the functions you use most often, saving valuable time during or between procedures

Workflow menu:

- Guides user through the entire OR workflow from start to finish
- Divided into three stages for maximum clarity: pre-op, intra-op and post-op
- Tasks are defined for each stage – these can be configured in line with your needs when installing the system
- Surgical safety checklists are integrated every step of the way – for maximum patient safety and peace of mind
The entire OR at the touch of a button

**Patient management:**
- Administer patient data and procedures
- Import patient data via DICOM worklist directly from the hospital network – minimizing errors
- Select patients with a single click
- Manually add patient data in an emergency
- Share patient context with external systems, e.g. for automatic patient selection

**Video routing:**
- Intuitive display of input and output signals on a single screen
- To change the signal being displayed, simply tap the corresponding icon
- Access drop-down menu for each input/output source by tapping the corresponding icon
- Video-over-IP with auto-detection of connected inputs
- Picture-in-picture composes individual display of up to four video sources
- Live preview on UI controls

**Finalize:**
- Save and edit videos and images after the procedure
- Take snapshots from videos, send data directly to PACS, or save on USB stick or DVD/BluRay
- Seamlessly add files to patient records in HIS
- Auto-export to predefined destinations
- Clean-up procedure for locally stored studies
Manual access:
- Access all TEGRIS functions, whether or not they are configured in your workflow menu
- Easily leave the predefined workflow and adapt to new circumstances

Video conferencing:
- Bidirectional video and audio connection
- Works with video conferencing devices of various brands
- High definition conferencing with all video signals available in the OR
- Integrated phone book and recent calls list
- Easy pick-up thanks to quick access menus

Remote workstation interface:
- Enables the use of external Viewstations
- Full remote control, including keyboard, mouse and trackpad functions
- Up to 3 instances may be connected independently
The entire OR at the touch of a button

Screen presets:
- Save presets for video routing and OR configurations for individual surgeons or procedures
- Create as many presets as you need and label them as you like
- Accelerate set-up, saving time under pressure

Recording:
- Record two video sources in HD quality simultaneously
- In-built timeshift recording – the system starts recording a few seconds before the record button is pressed
- Take snapshots
- Trigger recording by endscopy camera head buttons

OR table control:
- Adjust operating table settings directly from the user interface
- On-screen operation looks just like the original remote control – for ease of use
- Compatable with multiple OR tables, i.e. MAGNUS and OTESUS
OR light control:
- Direct operation of surgical lights, PowerLED, HLED and VOLISTA
- Highly intuitive – virtual operation panels look just like the real thing
- Operate VOLISTA with additional features, like color temperature and synchronization

Room control:
- Light and View, adjust room lighting and blinds
- Air and Flow, control air conditioning and laminar flow
- Power and Gas, highlight status and warnings for gas supply and power (IT systems)
- Centrally – at the touch of a button

Remote client:
- Access to the control interface of medical devices
- Partnership with several manufacturers
- TEGRIS as flexible and open platform
Meeting your needs – today and tomorrow

Scalable and future-proof

**TEGRIS is a modular solution**, so you only pay for the functionality you actually need. And because hardware and software are scalable, the system can grow in line with your requirements. Start off with two or three video sources, and add more when needed. Additional functions can be installed at a later stage, simply by upgrading the software – keeping OR downtime to a minimum.

**Designed for maximum flexibility**, TEGRIS interfaces with diverse systems including HIS, PACS and other patient databases. Plus, vendor-independence when it comes to endoscope manufacturers, for example, gives you greater freedom of choice when selecting medical devices. Making it a future-proof solution that will benefit your hospital for years to come.

**Maquet now also provide a complete range of wall-mounted monitors** equipped with the latest technology for perfect images. The monitors and touch screens in the proven glass design are intended for flush-mounted installation and seamless integration.

**Available in various sizes:**
- 19” touchscreen
- 27” Nurse Station with PC and keyboard
- 46” and 55” Viewstations

Sleek, safe, space-saving

The TEGRIS hardware is housed in a compact, robust casing. The space-saving unit can be placed in multiple locations – in the OR itself, for example, or in a server rack in a technical room. By eliminating unnecessary cables in the operating room, the system improves safety and creates a more ergonomic workspace. Plus, it looks good – the sleek, modern design perfectly complements state-of-the-art ORs while saving expensive space in the OR or technical rooms.
# TEGRIS MCare service plans

**Designed to get the most out of your TEGRIS system**

**TEGRIS MCare – a tailor made service range to meet your every demand:** securing stable system operations and preventing downtime is key to keeping your workflow running and associated costs down. The MCare service plans are designed to do just that: keeping your TEGRIS system running at its optimum functionality.

**The MCare basic offering is the MCare Preventive plan**

This is the ideal package for you if you aim at ensuring safe and reliable system operations at a low annual rate.

**Our top-of-the-line offering is the MCare Professional service plan**

coming with highest priority support and an uptime guarantee.

**The MCare Plus service plan** is the right solution to cover the full risk of any system failure, securing enduring operations and investment protection.

**Choose the plan that’s right for you**

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* Support available from 09.00 – 17.00 local time (Mondays to Fridays)

** Check with your local MAQUET representative for availability

*** Please check availability with HQ