

**Datasheet**

# **SOMATOM On.site**

*syngo* CT VA35

[siemens-healthineers.us/somatom-onsite](https://siemens-healthineers.us/somatom-onsite)





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# SOMATOM On.site

## Bringing critical care imaging to your patient

Intensive Care Unit (ICU) patients suffering from acute and neuro critical conditions have complex care requirements. Providing fast diagnostics is essential for staff to make quick treatment decisions with confidence. The SOMATOM® On.site, mobile CT scanner, enables head imaging with reliable and consistent SOMATOM image quality, right at the patient's bedside. Thanks to the latest advances in digital healthcare, the intelligent software myExam Companion together with our GO technologies guide users through the scanning process. With this workflow guidance the system is easy to use and enables greater consistency in image acquisition and quality across your team.

SOMATOM On.site will change the way you care for ICU patients suffering from neuro critical conditions. Reducing or eliminating transports to the radiology department for CT head imaging may help prevent related complication risk and allows your staff to concentrate on what matters most: providing optimal care for all patients within the department. With this fast access to Point of Care mobile CT imaging of the head, physicians can reach quick treatment decisions and changes in the patient's condition or arising complications for better outcomes. Additionally, offering CT imaging directly in the ICU allows the radiology department to maintain their scheduling.

With SOMATOM On.site, you can transform care delivery.

# Highlights



## Reduce patient transports

SOMATOM On.site offers CT imaging of the head directly in the ICU, reducing patient transports and risk. Acquiring images directly at the patient's bedside enables physicians to reach fast treatment decisions, therefore supporting better outcomes.



## Optimize staff deployment

SOMATOM On.site reduces the need for transporting patients to the radiology department for CT scans of the head. ICU staff can remain in the department and focus more on their core tasks and patient care. Offering bedside CT head imaging for critically ill patients can increase workforce efficiency and streamlines the imaging workflow.



## Achieve reliable and consistent image quality at the Point of Care

SOMATOM On.site brings SOMATOM image quality to the patient's bedside by combining proven technologies from existing SOMATOM scanners with the addition of newly designed components. Point of Care imaging reduces the number of ICU patient scans that need to be performed in the radiology department, potentially resulting in more streamlined utilization of stationary systems and staff, along with more predictable radiology appointment schedules.

# System Overview

- Integrated Touch UI with myExam Companion powered by GO technologies
- SAFIRE® Iterative reconstruction
- iMAR Iterative metal artifact reduction

- Dedicated X-ray tube (80 kV, 120 kV; 3 kW)
- Stellar detector
- 35 cm Gantry aperture
- 1.0 s Rotation time

- Telescopic scanner design
- Integrated patient scan support (Head holder for neuro imaging)
- Integrated patient body support (Shoulder board for neuro imaging)
- All-in-one system design with integrated computers



# System Operation

SOMATOM On.site features a new workplace design and system operation. The scan setup can be done via the integrated Touch UI, touchscreen display. The software is designed for ease of use and comprehensive system operation.

## Touch UI

### System operation

- Integrated Touch UI
- No additional workstation needed
- Integrated computing system (ICS)

### Two user modes

- Scan&GO (Basic User Mode, dedicated functionalities for ICU usage)
- Advanced Mode (based on standard software *syngo CT VA30*)

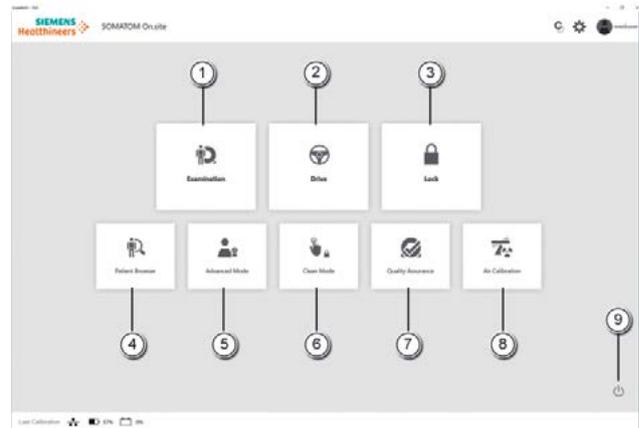
### User Interface

- Access to Scan&GO "Examination" (1)
- Drive Mode (2)
- Lock Mode (3)
- Patient Browser (4)
- Advanced Mode (5)
- Clean Mode (6)
- Quality Assurance (7)
- Air Calibration (8)
- Shut Down (9)

### Wireless connection to hospital network for image transfer<sup>1</sup>

### System status information

- Battery status (%)
- Error messages



## Driving

### Motorized Trolley

Gentle and easy driving with ergonomic handle and emergency manual override

### Integrated Camera

Real-time viewing on the Touch UI screen while driving and maneuvering

### Drive Mode

- Slow mode (0.32 km/h / 0.2 mph): for maneuvering the scanner around the patient bed or small spaces
- Fast mode (4.0 km/h / 2.5 mph): for routine driving, e.g., in hallways

<sup>1</sup> LAN connection is also available.

# System Operation

## Telescopic Scanner Design

### Positions of the telescopic scanner design



Drive and park position



Patient load/setup position



Scan start position



Scan end position

The telescopic scanner design contributes to the following:

- Holistic radiation safety
- Easy patient positioning, scan setup and workflow
- Reliable and consistent image quality

### Radiation safety

- Telescopic scanner design: internal movement of tube and detector
- Self-shielded gantry
- Attachable radiation shields for front and back gantry openings

### Scan setup and workflow

- Telescopic scanner design: moving the gantry to the "patient load/setup" position allows ample space for positioning the patient
- Integrated body support, shoulder board for neuro imaging: bridges the gap between the bed and scanner without the need for additional bed adapters
- Integrated patient support, head holder for neuro imaging: enables isocentric and fixed position of patient's head within the gantry
- Integrated Touch UI
- myExam Companion and GO technologies

### Image quality

- Telescopic scanner design: fixed patient position and stationary trolley base to prevent image artifacts from motion
- Dedicated X-ray tube
- Stellar detector
- State-of-the-art algorithms (e.g., iMAR and SAFIRE)

## Telescopic gantry for hassle-free acquisitions

SOMATOM On.site features an exclusive telescopic gantry design that houses the moving scanner components, with the tube and detector moving away from the patient which reduces the scatter radiation compared to CT scanners without this design.

With this technology, the telescopic gantry glides on the stationary system trolley base which remains fixed during scanning, eliminating common problems associated with scanners that move during image acquisition. The many lines and drains typically in place for ICU patients remain unaffected while scanning with the SOMATOM On.site, as the front gantry cover remains fixed throughout scanning.

Taking scanner, table, and patient movement out of the equation means that you do not have to make compromises.



# System Operation

## Batteries

The battery pack consists of 4 rechargeable lead-acid batteries.

- Battery pack nominal voltage: 48 V (4 x 12 V)
- Total battery pack capacity: 55 Ah @ 48 V

The batteries of SOMATOM On.site are integrated into the base of the trolley.

The system must be plugged in as discharged system will self power-off after reaching a battery threshold of 40% (safety mechanism); recharging can take up to 6 hours.

Charging of batteries after reaching the 40% threshold is expected to take 1h (discrepancies are possible due to battery status and usage).

## Connectivity

### Ports

- WIFI
- LAN access
- USB Port (2x)
- SD Port

### Service

- SRS Connection  
Smart Remote Services (SRS) is a secured data link that connects your medical system to Siemens Healthineers service experts. Via SRS, the performance and condition of your equipment can be monitored in real time. SRS makes a broad range of proactive and interactive services available.
- IBC (Internet based connectivity)  
→ Software VPN client for secure VPN tunnel from SOMATOM On.site to SRS back end via the internet  
→ WIFI and LAN SRS connectivity  
→ No hardware, e.g., router, necessary
- FAST Contact  
FAST Contact is the easiest way to contact Siemens Healthineers service experts directly from the scanner console for technical and clinical application support.

## Scanning

### Preparation

- Telescopic gantry in "patient load/setup" position for patient positioning (see images of telescopic gantry positions on page 6)
- Patient body support (Shoulder board for neuro imaging) positioned on the patient bed

### Scanning preparation

- Radiation shields for front and back gantry openings
- Telescopic gantry in "patient load/setup" position

### Scan planning

- Laser indicator is a visual for determining the scan range
- Select "scan start" and "scan end" to plan the scan range

### Safety

- Focus on staff (self-shielded scanner design; motorized trolley; no patient bed transfers)
- Radiation (self-shielded scanner design; radiation shields at front and back gantry openings; telescopic scanner design)
- Patient (telescopic scanner design: space to position the patient in "patient load/setup" position, no movement of front gantry cover during scanning)
- Stability throughout scanning (telescopic scanner design: stationary system trolley base; bed straps and integrated patient support accessories)

# System Operation: User Mode

## myExam Companion

SOMATOM On.site leverages key digital healthcare innovations to unleash the full potential of modern imaging technology – independent of the operator's experience. The scanner offers an intuitive user interface with myExam Companion, that offers built-in expertise to guide you through the complete imaging examination.

## Scan&GO (User Mode)

### Patient Browser

Patient selection and emergency patient registration

### Scan setup

Patient positioning confirmation and protocol selection

### Scan Planning

Scan&GO offers the possibility to set up and also perform the CT scan at the patient's bedside with the Touch UI. The selected exams are handled on the Touch UI with the concept of visual logic and a high degree of automation, so that users of any level of experience can perform scans quickly with ease.

In Scan&GO, protocols can not be modified (standard user mode). Protocols can only be modified within the Advanced Mode by an expert user.

## Check&GO

Check&GO offers the user the opportunity to check the images before sending them to the reading workplace (e.g., PACS). 4 mm slices will be shown in a preview window for scrolling.

## Recon&GO

Recon&GO performs automated postprocessing. This ready-to-read technology cuts down on workflow steps. Recon&GO delivers consistent results irrespective of the operator or experience level.

### Recon&GO – Inline Results includes:

#### Multi recon

Simultaneous reconstruction of different MPR orientations or image impressions (kernel and window settings)

#### Anatomical Ranges (Parallel/Radial)

Powered by ALPHA (Automatic Landmark Parsing of Human Anatomy), this technology automatically recognizes anatomical landmarks in the acquired images and creates ready-to-read standard orientations for different body regions (e.g. along the orbito-meatal line).

# System Operation: Advanced Mode

## Advanced Mode

Expert users can switch from Scan&GO to access the Advanced Mode in the main user menu, where they can access all functionalities of the software.

### Customer Support

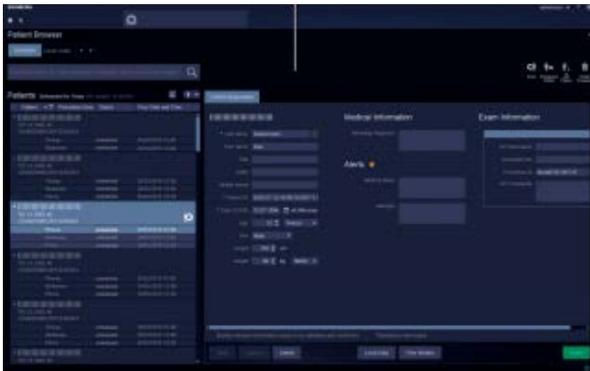
- Remote Assistance
- Smart Remote Services
- FAST Contact (contact with Customer Care Center)

### System and User Information

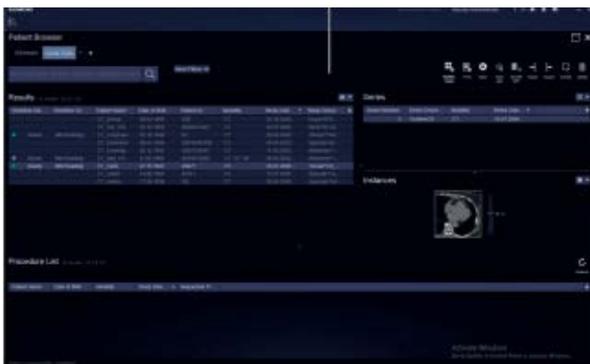
- Online Help (“?”-icon or via F1 key)
- System information
- System and error messages
- Screen recorder

### Patient Browser

- Scheduler (for scheduled examinations)



- Local Data (for viewing examinations)



## Job View

### Exam Designer

Create, change, or manage protocols

### Configuration Panel

Adjust workplace to individual needs

### Administration Portal

Used to perform administrative tasks

### IT Security

syngo System Security

### Fleet Management

teampay BASIC

## CT View&GO

CT View&GO is available and accessible in the Advanced Mode. As an all-in-one, cross-specialty viewing solution, CT View&GO provides a large variety of clinical applications and tools for smooth viewing in just one workflow.

Customizable user interface through a Favorite Toolbox

Automatic distribution and filming of images and results

Freely selectable window width and center

Single window

Preset organ-specific window settings, e.g., for soft tissue and bones

Image zoom and pan

- 2D and 3D (MPR, MIP, VRT)
- Evaluating tools
- Filming
- Vessel Extension
- Diameter/WHO area
- ROI HU Threshold
- Neuro DSA

# System Operation: Advanced Mode

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## Evaluation Tools

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### Parallel evaluation of more than 10 Regions of Interest

- Circle
- Irregular
- Polygonal

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### Statistical evaluation

- Area / volume
- Standard deviation
- Mean value
- Min. / max. values

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### Profile cuts

- Horizontal
- Vertical
- Oblique

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Distance measurement

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Angle measurement

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Online measurement of a 5 x 5 pixel size ROI

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Freely selectable positioning of coordinate system

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Crosshair

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Image annotation and labeling

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## 3D Visualization

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### Real-time MPR

- Real-time multiplanar reformatting of secondary views
- Variable slice thickness (MPR thick, MPR thin) and distance with configurable default values
- Viewing perspectives
  - Sagittal
  - Coronal
  - Oblique
  - Double oblique
  - Freehand (curvilinear)

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### MIP and MinIP

- MIP: Maximum Intensity Projection
- MinIP: Minimum Intensity Projection
- Thin MIP function for projection within a small slab to focus on particular vascular structure

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### syngo VRT (Volume Rendering Technique)

Advanced 3D application package for the optimal display and differentiation of different organs through independent control of color, opacity, and shading

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# System Software

## Image Reconstruction

### Image display

- Check&GO image display (512 x 512) during spiral acquisition on the Touch UI
- If the scanner is connected to WIFI, wireless transfer of images starts immediately after the end of scanning (otherwise after connection to LAN); user interaction possible if needed

### Minimum recon slice thickness

0.8 mm

### IRS (Image Reconstruction System) Storage

Disk space: 480 GB

Raw data storage: 180 GB

### Recon matrix

512 x 512

### HU scale

-8,192 to +57,343

### Reconstruction Speed

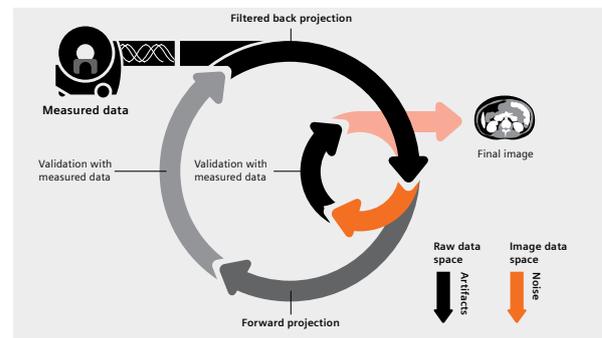
- Maximum reconstruction speed: 5 fps
- Maximum iterative reconstruction speed: 3 fps

### Field of view

- Standard: 26 cm / 10.2"
- Extended: 35 cm / 14" with HD FOV<sup>1</sup>

## SAFIRE

### (Sinogram Affirmed Iterative Reconstruction)



SAFIRE, an iterative image reconstruction algorithm

- Delivers high image quality at very low doses
- Reduces noise while maintaining image quality and detail visualization
- Provides fast image reconstruction

SAFIRE is easily incorporated into daily routine to maintain high patient throughput thanks to an excellent reconstruction speed.

<sup>1</sup> The image quality for the area outside the 26 cm scan field of view does not meet the image quality of the area inside the 26 cm scan field of view. Image artifacts may appear, depending on the patient setup and anatomy scanned. HD FOV cannot be used for scan FOV smaller than 26 cm.

# System Software

## iMAR (Iterative Metal Artifact Reduction)

iMAR is designed to yield images with a reduced level of metal artifacts compared to conventional reconstruction if the underlying CT data is distorted by metal being present in the scanned object.

## Storage

### ICS (Image Computing System)

- Disk space: 256 GB
- Image storage: 20 GB

## Dose and radiation topics

- Automatic Exposure Control (AEC) through manual selection of protocols for different patient requirements
- SAFIRE iterative reconstruction

## Protocol Password Protection

Prevent unauthorized access to scan protocols and avoid unauthorized modifications.

## DICOM SR Dose Reports

DICOM structured file allows for the extraction of dose values (CTDI<sub>vol</sub>, DLP) to create transparency and document dose values.

## DoseLogs

Whenever the set reference dose levels are exceeded automatically, a report is created on the system. The report can be used for audit purposes, for example.

## Dose Notification

The software checks the dose values per chronicle entry. May help to protect from over-radiation and warn the operator if set dose thresholds are exceeded.

## Dose Alert

The software checks the accumulated dose per z-position. May help to protect from over-radiation and warn the operator if set dose thresholds are exceeded.

## syngo System Security

IT security functionalities enable users to confront external IT threats to safeguard SOMATOM On.site, including unauthorized access to protected health information or manipulation of the system.

Continuous deployment of security hotfixes<sup>1</sup> via Smart Remote Services (SRS) will be provided on a regular basis to maintain the IT protection of your system.<sup>2</sup>

### Network connection

Network communication is restricted to the clinically relevant DICOM nodes (for example, PACS and RIS).

### Whitelisting (Microsoft Device Guard)

Marks all executable files to be used on the scanner and automatically prevents non-approved executables from being started.

### Malware protection (Microsoft EMET)

Prevents software vulnerabilities from being exploited by terminating, blocking or otherwise invalidating actions that might compromise the scanner.

### Trusted nodes

Reduces the risk of data manipulation by authenticating predefined secure medical devices in the institution's network (for example, PACS servers).

Security patches will be provided on a regular basis<sup>1</sup> to maintain the clinical function of the medical device. Updates will be pushed via Smart Remote Services (SRS) and have to be confirmed / executed by the on-site user<sup>2</sup>.

<sup>1</sup> Most recent scanner software must be installed

<sup>2</sup> Security hotfixes have to be confirmed/executed by the on-site user.

If the security patch needs to be installed on site by Siemens Healthineers, charges may result. Service conditions apply.

# System Hardware

## Gantry

**Aperture**  
35 cm / 14"

### Depth

< 100 cm / 39"

- The depth of the gantry is variable due to the telescopic scanner design (see page 6 for illustration).
- The position determines the gantry depth:
  - minimum in the "patient load/setup" position
  - maximum after the scan is completed. In the maximum position the gantry is as far back as mechanically possible.
- During the scan, the telescopic gantry moves back away from the patient, while the front gantry cover is stationary (no relative movement between the patient and the scanner). When the scan is completed the telescopic gantry is in the "scan end" position.
- The scan plane Z depth travel is just over 250 mm.

**Distance scan plane to gantry front cover**  
35 mm / 14"

The short distance from the gantry front to the scan plane allows for easy operator access.

**Distance focal spot to isocenter**  
31 cm / 12"

**Distance focal spot to detector**  
53 cm / 20"

### Scan field

- Standard: 26 cm / 10.2"
- Extended: 35 cm / 14" with HD FOV<sup>1</sup>

**Scan range**  
24 cm / 9.45"

**Rotation time**  
1.0 s

**Temporal resolution**  
Down to 600 ms native temporal resolution

**Pitch**  
0.35 – 1.5 (in steps of 0.05)

**Laser light markers**  
Laser for scan range planning

## Tube assembly

### Tube

Dedicated X-ray tube: asymmetric fixed anode tube



### Tube current range

25 mA (3 – 25 mA, in increments of 1 mA)

### Tube voltage

80, 120 kV

### Voltage [kV] with maximal available tube current [mA]

120 kV at 25 mA

### Focal spot size according to IEC 60336

1.1 mm x 1.6 mm

### Temperature monitoring

A software algorithm to prevent the tube from overheating.

### Tube cooling

Hybrid tube cooling system through air and water

- Air cooling the anode heat exchanger mass
- Liquid cooling the focal spot within the tube

### Tube heat capacity

0.2 MHU

### Tube cooling rate

0.03 MHU / min

### Generator power

Max. 3 kW

<sup>1</sup> The image quality for the area outside the 26 cm scan field of view does not meet the image quality of the area inside the 26 cm scan field of view. Image artifacts may appear, depending on the patient setup and anatomy scanned. HD FOV cannot be used for scan FOV smaller than 26 cm.

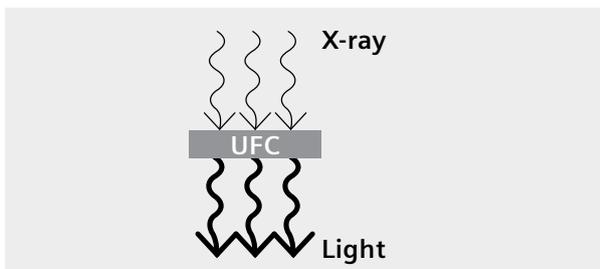
# System Hardware

## Data Acquisition System

### Stellar Detector:



### Detector material: UFC (Ultra Fast Ceramics)



### Detector width

2.4 cm

### Physical detector rows

32

### Detector row thickness

0.75 mm

### Detector channels per row

416

### Max. number of slices

- Acquired: 32
- Reconstructed: 32

### Acquisition mode

Spiral acquisition mode with 32 x 0.75

### Min. reconstructed slice thickness

0.8 mm

### Data sampling rate in projections/rotation

1,536

## Acquisition Workplace (AWP)

### Design

- Touch UI works as integrated ICS
- Hardware integrated into the scanner to enable all-in-one concept for mobile CT

### High Performance Computer CPU

Intel i7-U8650U

### RAM

16 GB DDR4 RAM

### Graphics card

Intel® UHD Graphics 620

### Hard disk

256 GB SSD

## Patient Positioning

### Integrated patient scan support

- Head holder for neuro imaging
- Support and stabilization of patient's head
- Supports isocentric positioning of the patient's head within the gantry

### Integrated patient body support

- Shoulder board for neuro imaging
- Compatible with beds that have a detachable headboard
- Shoulder board will be positioned on the bed
- Patient will be positioned in bed to have their upper body and shoulders supported by the body support

### Bed straps

For further safety, a set of straps are supplied for securing the scanner to the bed while in use.



# Image Quality

## Low-contrast Resolution

Low-contrast resolution is the ability to see ...

- a small object
- with a certain contrast difference
- on a particular phantom
- with a particular dose (CTDI<sub>vol</sub>)

Phantom	CATPHAN (20 cm)	
Object size	5 mm	3 mm
Contrast difference	3 HU	3 HU
CTDI <sub>vol</sub> (ø 16 cm)	~ 10 mGy	~ 16 mGy
Technique	Spiral acquisition, 10 mm slice, 120 kV, Br36, SAFIRE Strength 5	

The specified low contrast is the smallest diameter that could be visualized for a certain contrast at the specified dose with a specified images slice thickness. This method is subjective and depends on the viewer's visual acuity and on statistical fluctuations of the image noise. Therefore, the stated diameter combines the evaluation of several human observers and several images with the same scan parameters.

## High-contrast Resolution

The following table lists the nominal MTF values:

Application type	Typical head (Adult and child)	Sharpest (Adult)
Patient size	Adult	Adult
Kernel	Hr40	Hr68
MTF	50%	3.99 lp/cm ± 10%
	10%	7.31 lp/cm ± 10%
		11.31 lp/cm ± 10%
		14.40 lp/cm ± 10%

The Point Spread Function (PSF) image is obtained by scanning a 0.2 mm tungsten wire placed in air. The two dimensional Fourier transformation of the PSF generates a Modulation Transfer Function (MTF) of the system.

A 0.2 mm tungsten wire is placed in a protective PMMA tube filled with air.

The image matrix size used for evaluation of PSF is 30 mm x 30 mm.

Reconstruction is performed with a sufficiently extended CT scale that includes the high contrast range of the wire image (service mode).

## Homogeneity

	Application type	Typical head (Adult)	Typical head (Child)
Uniformity of CT Value	ø 20 cm water phantom	≤ 4 HU	≤ 4 HU
Image noise	ø 20 cm water phantom	3.74 HU ± 15%	7 HU ± 15%

## Dose, CTDI<sub>100</sub> Values mGy / 100 mAs

The following table displays the CTDI values (in mGy/Eff. mAs) for a ø 16 cm phantom at a collimation of 32 x 0.75 mm (24 mm in total).

Tube voltage	CTDI <sub>100</sub>	CTDI value for a ø 16 cm phantom
80 kV	CTDI <sub>100, central</sub>	0.36 mGy/Eff. mAs
	CTDI <sub>100, peripheral</sub>	0.55 mGy/Eff. mAs
	CTDI <sub>w</sub>	0.49 mGy/Eff. mAs
120 kV	CTDI <sub>100, central</sub>	0.90 mGy/Eff. mAs
	CTDI <sub>100, peripheral</sub>	1.20 mGy/Eff. mAs
	CTDI <sub>w</sub>	1.10 mGy/Eff. mAs

# Scatter Radiation

## Technique:

Stray radiation is indicated for the horizontal and vertical planes on the basis of the scanner coordinate system (intersection of scanner axis with scan plane) at maximum tube voltage (120 kV) and the maximum total collimation width ( $32 \times 0.75 \text{ mm} = 24 \text{ mm}$ ). A cylindrical PMMA phantom with a diameter of 16 cm and a length of 15 cm is centered in the scan plane for the stray radiation measurement.

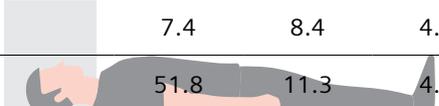
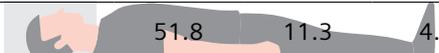
A  $1800 \text{ cm}^3$  cylindrical dose chamber with linear dimensions below 20 cm is used for the measurement. The accuracy of the stated value is determined by the accuracy of the chamber positioning ( $\pm 5 \text{ cm}$  in each direction, which may lead to tolerances up to  $\pm 20\%$ ) and by the accuracy of the dosimeter ( $\pm 5\%$ ). Backscatter from walls or other surfaces may cause additional variation in the radiation measurement.

The conditions for measurement and presentation of the data have been adapted from the specification of IEC 60601-2-44 (Ed. 3.2) 203.13.2 to reflect the technical aspects of the dedicated scanner design of SOMATOM On.site.

In contrast to typical CT scanners designed to be operated from outside the scan room, SOMATOM On.site provides radiation shields that can be attached to the front and back gantry openings. To account for this, the stray radiation data is provided for the scenario with the gantry positioned at 100 mm to represent an average scan position in spiral scans of patients (radiation shields completely closed).

Note: Stray radiation in patient examinations can vary, depending on the utilization and effectiveness of positioning the radiation shields at the gantry openings and around the patient.

**Vertical plane: Stray radiation with front and back radiation shields closed (in nanoGray (nGy) per mAs)**

	2.0 m	1.5 m	1.0 m	0.5 m	0.0 m	-0.5 m	-1.0 m	-1.5 m	-2.0 m
1.5 m	0.2	0.2	0.2	0.1	1.0	2.0	0.9	1.1	1.3
1.0 m	0.7	0.4	0.2	0.3	2.2	5.8	2.4	2.9	2.4
0.5 m	1.4	2.4	2.2	0.2		7.4	8.4	4.6	2.6
0.0 m	2.6	2.9	7.2	35.0		51.8	11.3	4.8	2.9
-0.5 m	1.4	2.2	3.4	1.7		15.4	6.2	3.8	2.4

**Horizontal plane: Stray radiation with front and back radiation shields closed (in nanoGray (nGy) per mAs)**

	2.0 m	1.5 m	1.0 m	0.5 m	0.0 m	-0.5 m	-1.0 m	-1.5 m	-2.0 m
1.5 m	0.1	0.2	0.2	0.2	0.7	1.7	1.2	1.4	1.7
1.0 m	0.5	0.2	0.2	0.2	0.2	8.4	2.9	2.9	2.2
0.5 m	1.9	2.2	1.7	0.2		10.8	8.4	4.6	2.6
0.0 m	2.6	2.9	7.2	35.0		51.8	11.3	4.8	2.9
-0.5 m	1.9	2.2	1.4	0.5		11.3	8.4	4.3	2.6
-1.0 m	0.2	0.2	0.2	0.2	2.6	7.4	3.1	2.9	2.4
-1.5 m	0.2	0.2	0.2	0.2	1.4	1.7	1.2	1.4	1.7

# Installation

Dimensions	Height (mm / inch)	Width (mm / inch) <sup>1</sup>	Depth (mm / inch) <sup>2</sup>	Weight (kg / lbs) <sup>3</sup>
<b>Gantry</b>	1,550 / 61.02	1,600 / 62.99	7,400 / 29.13	990 / 2,183



## Parking

- Minimum parking location dimensions:  
Height 62.99 in (1.60 m)  
Width 78.74 in (2.00 m)  
Depth 39.37 in (1.00 m)
- Power supply plug-in and LAN access recommended

## Power Supply

**Nominal voltage**  
100 – 240 VAC

**Nominal line frequency**  
50, 60 Hz

## Power Consumption

**Max. power consumption**  
≤ 1.2 kVA

**Standby**  
≤ 0.5 kVA

## Power consumption according to COCIR and GPP

Use scenario 24-hour power consumption

**Off**  
0 kWh

**Idle (stand-by)**  
8.4 kWh

## Electromagnetic Compatibility

This product is in compliance with IEC 60601-1-2 and fulfills CISPR 11 Class A.

## Room Environment

**Temperature range**  
10 – 35 °C / 50 – 95 °F

**Relative air humidity without condensation**  
20 – 85%

**Heat dissipation in operation**  
≤ 0.8 kW

## Surface Area for Installation<sup>2</sup>

**Point load**  
225 kN (maximum possible floor load (two-point load) per wheel that may arise during transport) or 250 kg per wheel

**Installation altitude (sea level)**  
Up to 3000 m

**Tolerance for mechanical stress/shocks**  
Max. 15 G

**Maximum uphill grade**  
< 7°

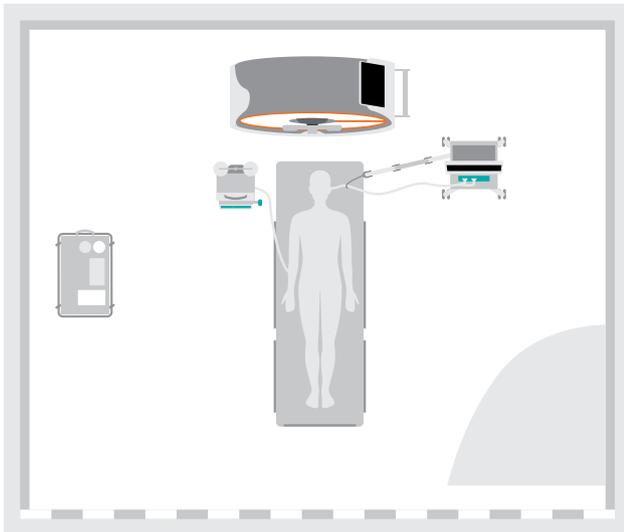
<sup>1</sup> including handle

<sup>2</sup> in "Park and drive" position. In "Scan end" position (fully extended), the depth of the system is 8,200 mm/32.28 inch.

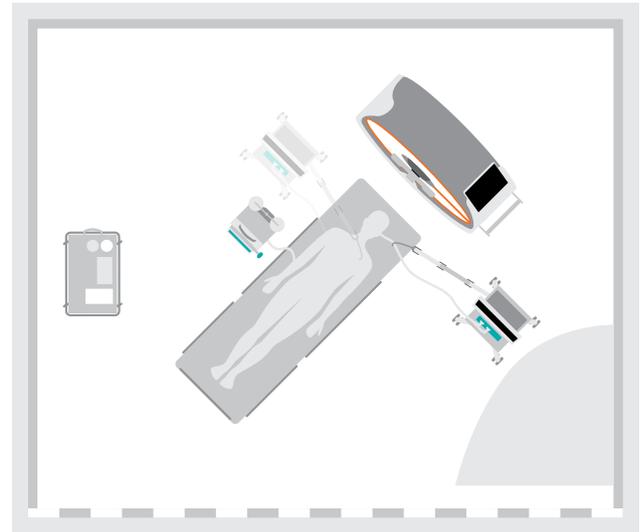
<sup>3</sup> including radiation shields, and integrated patient support accessories

# Installation

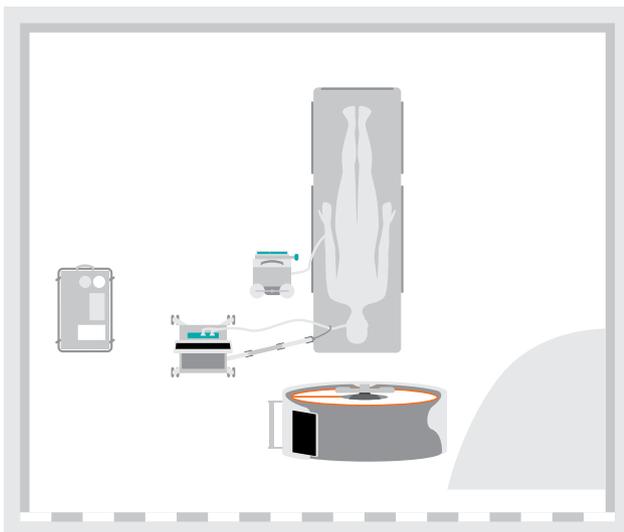
Positioning SOMATOM On.site in patient rooms depends on the room size, layout, equipment, neighboring patients, etc. The following are typical scenarios.



**Scenario 1:**  
The bed and other equipment will be moved away from the wall to allow SOMATOM On.site to be positioned between the wall and the head of the patient's bed. Allow sufficient clearance for the telescopic gantry to extend (min 20 cm).



**Scenario 2:**  
The bed and other equipment will be moved away from the wall at an angle. SOMATOM On.site will be positioned at an angle to the wall at the head of the bed. Allow sufficient clearance for the telescopic gantry to extend (min 20 cm).



**Scenario 3:**  
The bed and other equipment will be moved away from the wall. The bed will be rotated 180 degrees (closest to the doorway/hallway) to allow SOMATOM On.site to be positioned in the doorway/hallway at the head of the patient's bed. Allow sufficient clearance for the telescopic gantry to extend (min 20 cm).

# Siemens Healthineers Equipment Services

Digitalizing healthcare allows us to be right by your side 24/7, even when you can't see us. It's our smart combination of digital and personal support that keeps your operations running smoothly.

This is how we understand Customer Services: Connecting with you to support you that both your equipment and knowledge are up to date and at the ready – so you can elevate your level of patient care.

**Always on. Always in touch.**

## Advance Plans<sup>1</sup>

The **Advance Plans** are Siemens Healthineers' service agreements for maximized efficiency and excellent clinical outcome in the digital era. They comprise a wealth of innovative and intelligent services that keep you cutting-edge, connected and competitive.

**Be cutting-edge** – deliver precision medicine effectively by leveraging innovation to keep your equipment constantly secure and future-proof

**Be connected** – get fast support and instant access to insights and know-how through our experts and digital touchpoints

**Be competitive** – leverage intelligent services to keep your systems efficient and your clinical operations running smoothly

## AdvanceNow

AdvanceNow is the Advance Plans' digitally driven long-term update & upgrade service, keeping your SOMATOM On.site highly efficient throughout its entire serviceable life.

AdvanceNow provides continuous and proactive upgrades, updates and cybersecurity patches as soon as they are available and computing hardware is replaced as soon as required.

## Standard services for SOMATOM On.site

- Continuous software upgrades, updates & cybersecurity patches
- Hardware exchange as required
- Planned maintenance
- Corrective maintenance
- Digital platforms (SRS, teamplay Fleet & PEPconnect)

## Additional services for SOMATOM On.site

- Cover coverage
- Education Plans
- PEPconnections
- Remote Assist
- Preferred Response Time
- Monoblock coverage, i.e., tube, main board and detector coverage<sup>2</sup>

Combine traditional services, optimized for reliable equipment performance, with digital services and operations, maximizing / leveraging / optimizing efficiency in the digital era.

<sup>1</sup> Optional

<sup>2</sup> Standard service with Advance Plan MAX or Advance Plan FIT

The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities. If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

# Performance Management

## teamply

As part of the teamply digital health platform, teamply applications for performance management help you to make quick and well-informed decisions by offering a clear overview of your performance data. Monitor your imaging throughput, dose levels, scanner protocols, utilization of staff, rooms and resources down to each device. Simplify your reporting and identify areas for improvement.

The basic functionalities of the teamply performance management applications are free of charge.<sup>1</sup> The following applications have a teamply BASIC option:

- teamply Dose
- teamply Usage
- teamply Images<sup>2</sup>
- teamply Images Research<sup>2</sup>

To use the more advanced functionalities you need access to the fee-based teamply PREMIUM<sup>3</sup> applications. The following applications have a teamply PREMIUM applications option:

- teamply Dose
- teamply Usage
- teamply Insights
- teamply Reports
- teamply Images<sup>2</sup>
- teamply Images Research<sup>2</sup>

SOMATOM On.site is compatible and ready for teamply. For more information and experiences, please visit [www.siemens.com/teamply](http://www.siemens.com/teamply)

### teamply Dose

The teamply Dose application provides easy access to dose data to monitor imaging radiation and injected doses, no matter the modality type or vendor<sup>4</sup> and facilitates compliance with dose management requirements.

### teamply Usage

The teamply Usage application provides easy access to institution scores and trends. From a daily overview of the system scores to the detailed analysis of utilization trends, teamply Usage allows seamless access to your institution's performance and beyond.<sup>5</sup>

### teamply Insights

The teamply Insights application provides access to your radiology department data enabling you to build highly flexible, personalized and interactive data visualization boards. Take deep dives into your institution's data to help better understand, e.g., dose outliers or insufficient staffing. Take well-informed decisions to improve resource utilization.

### teamply Reports

The teamply Reports application provides predefined data visualization sheets to report dose-, usage- or protocol-related data to your national authority. The reports are developed in accordance with local rules and regulations, speeding up the process, e.g., when you send dose outlier reports to the relevant quality body.

### teamply Images / Images Research

The teamply Images / Images Research application provides highly efficient collaboration features and a secure environment to share and comment imaging studies for research and education. These applications come with a web-based full-screen DICOM image viewer to ensure smooth previewing on the go.

<sup>1</sup> Please ask your sales representative about whether the product is available for your country.

<sup>2</sup> Please ask your sales representative whether Images or Images Research application is available for your country. Due to regulatory reasons teamply Images is not available in all countries where other teamply offerings are available. Instead, teamply Research is available that can be used for research and education.

<sup>3</sup> Please contact a Siemens Healthineers sales representative for details on the annual subscription contract for teamply PREMIUM applications.

<sup>4</sup> teamply PREMIUM applications is required for multi-vendor support.

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey toward expanding precision medicine, transforming care delivery, and improving patient experience, all enabled by digitalizing healthcare.

An estimated 5 million patients globally benefit every day from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics, and molecular medicine, as well as digital health and enterprise services.

We're a leading medical technology company with over 120 years of experience and 18,500 patents globally. With about 50,000 dedicated colleagues in over 70 countries, we'll continue to innovate and shape the future of healthcare.

The outcomes and statements provided by customers of Siemens Healthineers are unique to each customer's setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, and level of service/technology adoption), there can be no guarantee that others will achieve the same results.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens Healthineers sales organization worldwide. Availability and packaging may vary by country and is subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features, which do not always have to be present in individual cases.

Siemens Healthineers reserves the right to modify the design, packaging, specifications, and options described herein without prior notice. For the most current information, please contact your local sales representative from Siemens Healthineers.

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**Siemens Healthineers Headquarters**

Siemens Healthcare GmbH  
Henkestr. 127  
91052 Erlangen, Germany  
Phone: +49 9131 84-0  
siemens-healthineers.com

**USA**

Siemens Medical Solutions USA, Inc.  
Healthcare  
40 Liberty Boulevard  
Malvern, PA 19355-9998, USA  
Phone: +1-888-826-9702  
siemens-healthineers.us