



Winner
AuntMinnie
Award 2017

**Stand out in
advanced CT procedures**
SOMATOM go.Top

International version. Not for distribution or use in the U.S.

siemens.com/somatom-go-top

SIEMENS
Healthineers

Staying ahead in a challenging market

Changes in demographics and the healthcare market create a challenging situation for healthcare providers. While facing reimbursement cuts, they have to provide for more, and older, patients.

Based on many conversations with healthcare professionals, we realized that we needed to pursue new ideas and approaches to computed tomography. We therefore conducted extensive interviews with 500 customers from 11 countries to learn about your everyday needs and challenges. In co-creation sessions, we asked you what your ideal CT scanner would look like.

SOMATOM go.Top – Stand out in advanced CT procedures



Go for high performance with trend-setting workflows

- Benefit from a groundbreaking concept of mobile operation and workflow automation
- Allows you to deliver high performance every day
- Helps you establish and run your CT business efficiently



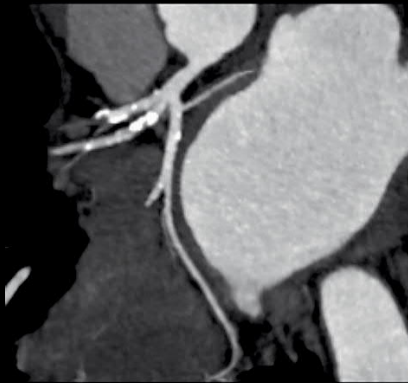
Go for the full clinical spectrum with patient-centric technology

- Confidently offer specialized CT procedures, including Dual Energy
- Optimally adapt to each type of patient with patient-centric technologies and workflows
- Turn challenging fields into routine – and serve the full clinical spectrum



Go for business growth with an all-in-one solution

- Benefit from a scanner designed with an eye to reducing your total costs of ownership
- Take advantage of additional reimbursement opportunities for your business growth



Easy acquisition and consistently crisp visualization with automated Recon&GO results⁴



Fast and standardized acute care imaging through guided and automated GO technologies⁴



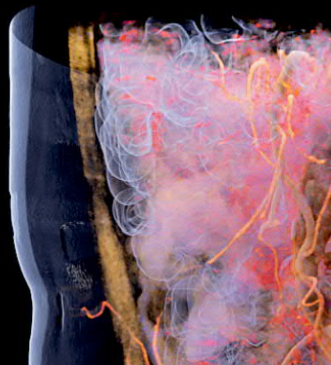
Robust and routine-ready diagnosis in oncological imaging with zero-click Recon&GO TwinBeam Dual Energy⁴



Excellent contrast-to-noise ratio at powerful and fast low-kV (70 kV) imaging⁴



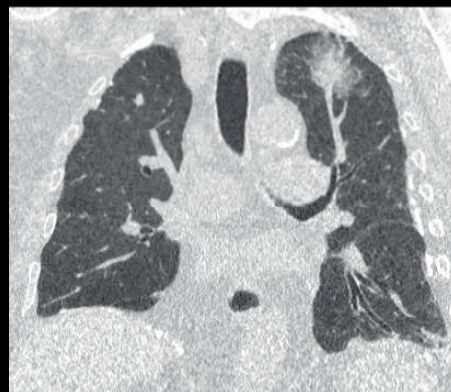
Excellent low-contrast performance for differentiation of gray/white matter⁴



Excellent contrast-to-noise ratio for every patient with CARE kV and 10 kV steps⁴



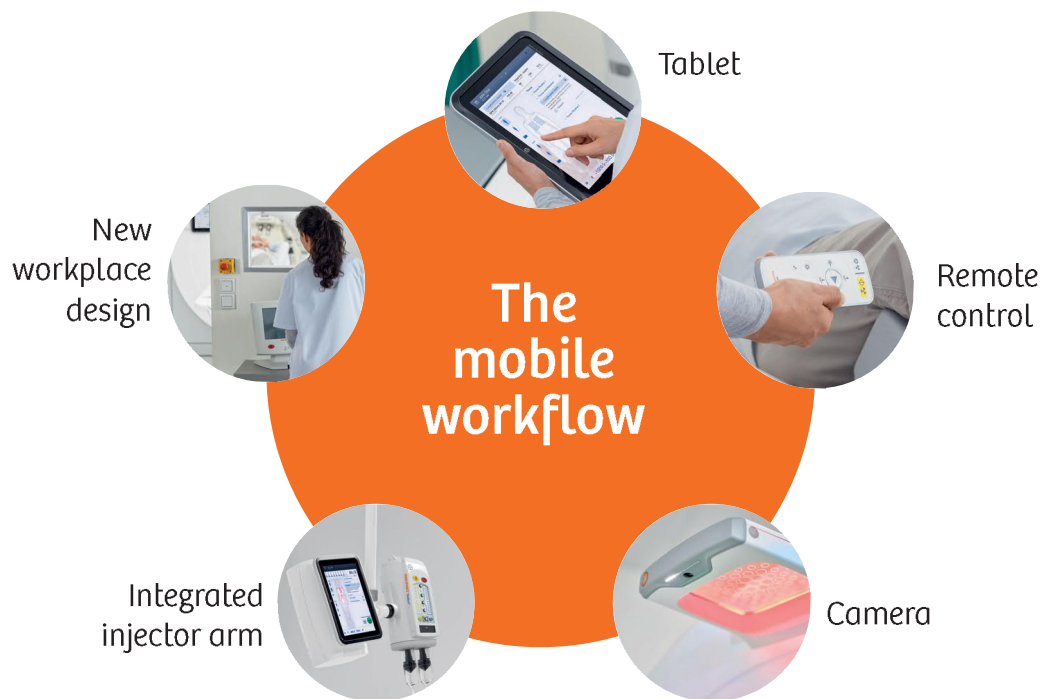
Excellent orthopedic imaging through powerful metal artifact reduction⁴



Fast and consistent low-dose (0.45 mGy) native lung scan with Tin Filter, available in many kV levels⁴

Work more efficiently and patient-friendly

For efficiency – independent of the operator's level of experience – and a more personal interaction with the patient, SOMATOM go.Top is built on a unique concept of mobile operation and workflow automation.



Built around a new mobile workflow, SOMATOM go.Top features a lineup of innovative solutions. Tablet, remote control, camera, integrated injector arm, and a new workplace design bring an unparalleled level of flexibility and mobility to daily CT procedures.

Tablet

The lightweight, high-resolution tablet gives you total freedom in how you work. With Scan&GO technology, you just need a few steps for the entire scan. You can prepare the scan directly at the gantry to stay longer with the patient.

Remote control

The easy-to-use Bluetooth remote control complements the tablet operation by streamlining scanning and making workflow processes more efficient. It simplifies patient positioning by removing the need to use hard-to-reach controls on the gantry.

Camera

By helping you keep an eye on the patient at all times, the gantry-integrated camera makes it easy to provide better care.

Integrated injector arm

The unique gantry-mounted injector arm of SOMATOM go.Top lets you position the injector where you need it, when you need it.

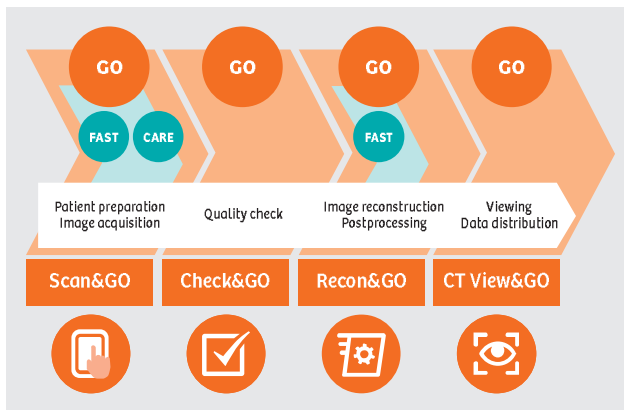
New workplace design

Thanks to gantry-integrated computers, SOMATOM go.Top gives you complete flexibility in where you position the workstation. Depending on your needs and infrastructure, you can set it up in the same room, outside the scan room, or in a separate control room.

Automate your workflow with GO technologies

By reducing repetitive workflow steps, GO technologies help standardize and simplify all departmental processes – from patient setup to image distribution, archiving, and reading. You can therefore work more efficiently and focus on your patients – two key factors for running a successful business.

GO technologies

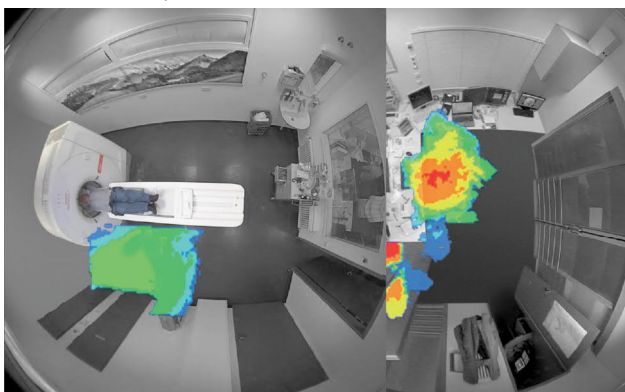


- **Scan&GO** – A tablet app that allows you to control scans remotely. Choose whether to operate the scanner at the gantry or from outside the room, and benefit from faster patient preparation and positioning.
- **Check&GO** – An intelligent algorithm that flags problems with coverage or contrast media distribution as they occur. Correct issues on the go, prevent subsequent errors in multiphase scans, and avoid archiving suboptimal images.

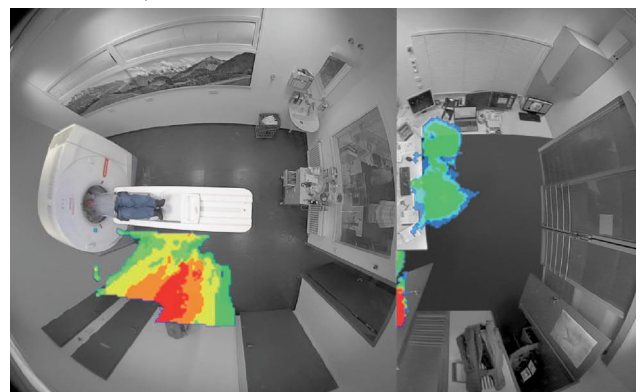
- **Recon&GO** – Zero-click postprocessing as part of the standard reconstruction tasks. This ready-to-read technology saves time and cuts down on workflow steps.
- **CT View&GO** – An all-in-one, cross-specialty viewing solution that provides a large variety of clinical applications and tools directly at the scanner – for smooth reading in just one workflow.
- **FAST and CARE** – Fully assisting scanner technologies (FAST) bring speed and efficiency to daily CT routines. They make complex procedures more intuitive and enhance consistency through standardized workflows. Combined applications to reduce exposure (CARE) optimize dose level and image quality, and offer patient-friendly scans with parameters adapted to the individual anatomy.

Spend most of the time with the patient¹

Standard workflow



Mobile workflow



low

Average time spent on location

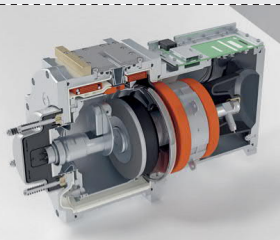
high

Go for the full clinical spectrum with patient-centric technologies

SOMATOM go.Top enables you to confidently offer specialized CT procedures, including Dual Energy and cardiac CT, for additional diagnostic information. With patient-centric technology and workflows to optimally adapt to each type of patient.



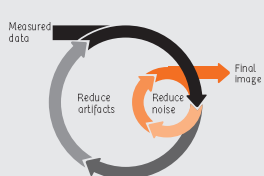
The **Stellar detector** features fully integrated components for lower image noise in every scan and continuous 0.6 mm collimation across the full width. It is equipped with an advanced **3D antiscatter grid** for precision imaging. This high-end technology is carefully manufactured to achieve excellent grid homogeneity. It minimizes scattered radiation and cross-talk, so you can use less radiation to produce outstanding, high-resolution images with minimal noise.



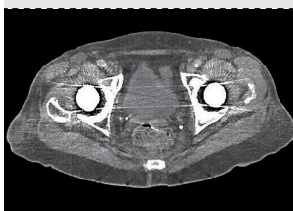
High Power 70 and the **Athlon™ tube** allows you to scan at 70 kV with up to 825 mA. Scanning at such a low voltage achieves better iodine contrast for sharper images, even in small distal vessels. **CARE kV** automatically tailors tube voltage to each patient and clinical indication in 10 kV Steps. With optimal kV levels in every case, CARE kV keeps dose low, for less dose and high contrast resolution. **CARE Child** offers targeted solutions for minimizing radiation exposure while maintaining diagnostic image quality.



The **Tin Filter** cuts out lower energies to reduce dose and optimize image quality at the interface between soft tissue and air. Clinical experience also shows that Tin Filter technology reduces beam-hardening artifacts and improves image quality in bony structures.



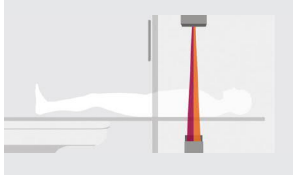
SAFIRE² (sinogram affirmed iterative reconstruction) is an iterative reconstruction algorithm that delivers excellent image quality at low doses. It is fast, simple to use, and can be easily implemented into daily routine.



iMAR³ (iterative metal artifact reduction) reduces metal artifacts for better image quality with no increase in dose. The high-end algorithm can handle a wide variety of metal implants for smoother, more efficient workflows.



Guide&GO is the first tablet-based solution for CT-guided interventions. Control the entire procedure from the tablet and remote control, and navigate images using intuitive touchscreen functions familiar to any smartphone user.



TwinBeam Dual Energy technology acquires low- and high-kV datasets in a single scan. This produces rich diagnostic information that a conventional single source scan cannot deliver. By allowing you to characterize, highlight, and quantify different materials, TwinBeam Dual Energy gives you greater diagnostic confidence with virtually all patients.



Technical specifications

| | |
|--------------------------|--|
| Slices | 64 (128 with IVR) |
| Rotation times | up to 0.33 s |
| Tube | 7.0 MHU (17.5 MHU with SAFIRE ²) |
| Power | 75 kW (187 kW with SAFIRE ²) |
| High voltage | 70–140 kV in 10 kV steps, Sn100, Sn110, Sn120, Sn130, Sn140 |
| mA | up to 825 mA |
| z-coverage | 3.84 cm |
| Table scan range | up to 200 cm |
| Max. table load | up to 307 kg |
| Iterative reconstruction | SAFIRE ² |

Siemens Healthineers Connect Plan

The Siemens Healthineers Connect Plan⁸ is an **all-new service plan** that comes standard with the investment of SOMATOM go.Top. It fully utilizes the capabilities of the connection to our digital platforms – SRS, PEPconnect,⁹ LifeNet – and to our remote services. This allows you to receive **seamless support, anytime**. It covers the 2nd and 3rd year after system purchase and gives you the financial confidence to receive premium service, matching your total cost of ownership requirements.

Absolute dose values

| Type of examination | Reference values | | Default protocol SOMATOM go.Top ⁷ |
|----------------------------------|-----------------------------|------------------|---|
| | European Union ⁵ | USA ⁶ | |
| Head routine | 60 | 75 | 41.27 |
| Thorax routine | 30 | N/A | 5.42 |
| Lung low dose with Tin Filter | N/A | N/A | 1.06 |
| Abdomen routine | 35 | 25 | 9.85 |

All values: CTDI_{vol} (in mGy)

Gentle voice and sound design

Thanks to targeted **suppression of noise** as well as optimized fan location and airflow, the gentle sound design of SOMATOM go.Top improves your working environment and increases patient comfort (noise level of 63 dB). Furthermore, it allows patients to benefit from **gentle voice guidance** of breathing instructions.

Energy consumption per day

The average energy consumption with 20 patients per day is only 17.6 kWh.¹⁰

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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.

The statements by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results.

The customers cited are employed by an institution that might provide Siemens Healthineers product reference services, R&D collaboration, or other relationship for compensation pursuant to a written agreement.

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¹ Preliminary results from a study with the SOMATOM go. platform. Courtesy of Erlangen University Hospital, Erlangen, Germany.

² In clinical practice, the use of SAFIRE may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task.

³ 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. The exact amount of metal artifact reduction and the corresponding improvement in image quality achievable depends on a number of factors, including composition and size of the metal part within the object, the patient size, anatomical location, and clinical practice. It is recommended to perform iMAR reconstruction in addition to conventional reconstruction.

⁴ Courtesy of Erlangen University Hospital, Erlangen, Germany.

⁵ European Guidelines on Quality Criteria for Computed Tomography (<http://www.drs.dk/guidelines/ct/quality/htmlindex.htm>).

⁶ American College of Radiology (CT Accreditation Program Requirements, Amended 2018).

⁷ Dose values based on an average patient (1.75 m and 75 kg) examined with SOMATOM go.Top standard protocols and syngo CT VA20A.

⁸ Powered by Smart Remote Services. Siemens Healthineers Connect Plan is subject to regional adaptations/restrictions.

⁹ PEPconnect availability is subject to regional restrictions.

¹⁰ This calculation is based on a simplified COCIR calculation model for power consumption, with an accuracy of approximately +/-1 kWh/day (CT routine abdomen scan). For a simple model we only focus on the system status "scanning" and "idle" (standby).