

Data



MULTIX PRO/TOP
VERTIX Solitaire
VERTIX PRO/TOP/S

Radiographic X-ray systems that make life easier

SIEMENS
medical

MULTIX PRO/TOP VERTIX Solitaire VERTIX PRO/TOP/S



Faster and safer diagnosis with the MULTIX radiographic systems

When it's a question of accurate diagnoses, imaging procedures such as X-ray examinations are still indispensable.

With Siemens, you'll find a reliable partner with more than 100 years of experience in classic radiography – experience from which your hospital or private practice can benefit.

MULTIX TOP and MULTIX PRO for radiographic rooms are prime examples of this experience.

MULTIX radiographic systems feature outstanding image quality with minimal dose and provide a first rate basis for diagnoses.

They make repeat exposures a thing of the past and get the images to the physician fast.

Radiological technologists will appreciate the system's flexibility and advantages such as simple operation, easy accessibility, and a large range of movement with respect to the X-ray assembly and patient positioning.

This flexibility allows the technologist to concentrate on the patient. Improved quality of life for all through efficient health care – just as it should be.

The MULTIX family of radiographic systems feature a modular design that allows you to tailor the configuration to meet your diagnostic needs:

- lungs, skeletal system, trauma
- bedside exposures
- routine, emergency room diagnostics
- orthopedic applications
- tomographic exposures

Solutions that meet every single customer requirement

What you need:	Our solution:
Cost-effective entry-level floor-mounted system with height adjustable table	MULTIX PRO
Floor-mounted system with height-adjustable table and electronic tomography (planigraphy)	MULTIX PRO P
Ceiling-mounted solution for optimum table access, and adjustable table height	MULTIX TOP
Ceiling-mounted solution for optimum table access with adjustable table height and electronic tomography (planigraphy)	MULTIX TOP P
Ceiling-mounted solution for optimum table access, adjustable table height, and Automatic Cassette Size Sensing (ACSS)**	MULTIX TOP ACSS
Ceiling-mounted solution for optimum table access, adjustable table height, and Automatic Cassette Size Sensing (ACSS)** and synchronization	MULTIX TOP ACSS N
Ceiling-mounted solution for optimum table access, adjustable table height, Automatic Cassette Size Sensing (ACSS)** , and electronic tomography (planigraphy)	MULTIX TOP ACSS P
Ceiling-mounted solution for optimum table access, height-adjustable table, cassette function with Automatic Cassette Size Sensing (ACSS)** , synchronization and electronic tomography (planigraphy)	MULTIX TOP ACSS P N
Ceiling-mounted solution for self-supporting operation	VERTIX Solitaire
In addition:	Our solution:
Bucky wall stand with cassette function with or without Automatic Cassette Size Sensing (ACSS)**	VERTIX PRO*
Bucky wall stand with cassette function with or without Automatic Cassette Size Sensing (ACSS)** and a variable tiltable Bucky tray	VERTIX TOP*
Bucky wall stand, motorized height-adjustable and tiltable Bucky tray, automatic cassette loading, off-center movable cassette, cassette function with/without Automatic Cassette Size Sensing (ACSS)**	VERTIX S*

* Option; ** Automatic Cassette Size Sensing

MULTIX PRO/TOP

MULTIX PRO/TOP – With the focus on the user



A pleasant atmosphere, comfort, and short examination times are becoming increasingly more important in the radiology department.

This is where our MULTIX systems really shine.

The MULTIX systems were developed in collaboration with an international team of medical professionals.

The MULTIX TOP system is the number one choice around the world for fast and simple routine exposures of standing, sitting or lying patients.

The slim design of the patient table allows you free access to the patient from all sides.

Experienced medical staff will notice at first glance what a group of radiological technicians described as “a system that was not developed solely by engineers, but was obviously designed in collaboration with medical staff!”

This system will meet your clinical requirements down to the smallest detail.

Its successful system design explains why more than 3,000 MULTIX systems were sold to date.

Our radiographic systems offer features as standard equipment that are not readily available with most other systems.

Their ergonomics, simplified operation, and radiation protection:

- The table brakes and height adjustment are controlled via a foot kick-switch that you can customize during the installation process.
- Moveable components are easy to adjust.
- X-ray tube and Bucky grid movements are operated with one hand.
- Operating controls are arranged according to their frequency of use.
- The operating elements for movement, collimator light, and tomographic parameters are centrally located.
- Patients can be accessed from all sides, particularly when using the TOP versions, thanks to the slim design of the table base.

- The grid can be easily removed for pediatric exams.
- The Bucky tray is ergonomically rounded to avoid sharp edges.
- Patients up to 227 kg (500 lbs.) can be examined.
- The tabletop is available with an optimal proximity switch.
- The standard automatic exposure control system (IONOMAT) prevents repeat exposures.
- The ACSS* cassette function saves time and protects the patient against overexposure.
- The extremely slim patient table with a tabletop film distance of 53 ± 2 mm is a seal of quality. After all, you're responsible for the quality of the images. And you shouldn't have to compromise.
- The dose measurement chamber CAREMAX* provides additional radiation protection. Upon request, it can be integrated into the collimator with automatic collimation.

A table that gets down to the patient's level

- Our radiographic tables offer motorized adjustment allowing children and injured or handicapped patients to be positioned on the table with ease.
- Patients up to 190 cm in height can be examined from head to toe without repositioning.

Electronic tomography

- Electrically controlled tomography – without tomographic rods – for rapid and automatic procedures.
- Tomographic parameters such as tomo angle, time, and height can be selected directly at the tube support.
- Motorized adjustable tomo height (3 mm – 250 mm) can also be indicated on the patient's body via a tomographic height light localizer.*

* Optional



More cost-effective procedures

- proven, system-tested components from Siemens
- low life-cycle costs
- simple, ergonomic, accurate patient-oriented operation
- high patient throughput
- standard automatic exposure control

Reliable and safe investments for the future through:

- an upgrade strategy for flat panel detectors in the MULTIX TOP systems. If you're interested, please contact us.
- cutting-edge technology, such as integrated dose measurement*
- optimal image quality with minimal dose.

MULTIX PRO/TOP

MULTIX TOP with synchronization

During synchronization, the ceiling stand automatically follows the table lift and the Bucky wall stand.

The synchronization feature can be selected from the table or from the VERTIX TOP* or VERTIX S* Bucky wall stand.

You select an SID (source image distance) of your choice and choose the synchronization option that remains constant during table movement and height-adjustment of the catapult Bucky on the Bucky wall stand.

What does this mean for you? Flexibility and independence because you only need to select one SID setting.

Synchronization can be used to work with the catapult Bucky in the table as well as for free tabletop exposures.

When selecting a tomography program on the support arm, the ceiling stand automatically starts at the programmed SID.

* Optional



When selecting the synchronization option, the ceiling stand follows...

...the vertical travel of the 90° tilted catapult Bucky...



...the table travel



...the vertical travel of the Bucky tray

VERTIX Solitaire

VERTIX Solitaire – the flexible lung and skeletal workstation with ceiling stand and Bucky wall stand*

The VERTIX Solitaire is especially suited for patients positioned on a stretcher and for bedside exposures (i.e. traumatology).

* Option



Table optional

VERTIX PRO/TOP

VERTIX PRO* and VERTIX TOP* – two Bucky wall stands that expand your diagnostic capabilities

VERTIX PRO* and VERTIX TOP* complement the MULTIX and have been optimized for examinations of the thorax, abdomen, pelvis, skull, spinal column, and extremities.

VERTIX TOP* – offers, in addition to the features above, a tiltable + 90°/– 20° Bucky.



VERTIX S

VERTIX S – the Bucky stand with motorized, height-adjustable as well as tiltable catapult Bucky

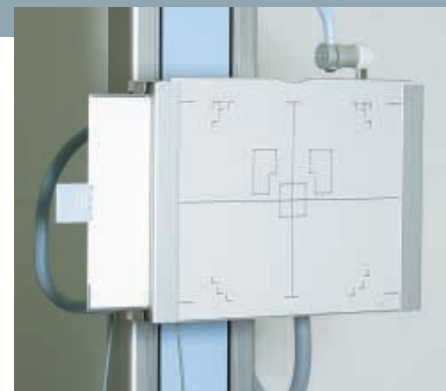
Free-standing or wall mounted Bucky for X-ray exposures with horizontal, vertical or oblique beam projection for patients who are either standing, sitting or lying down.

The Bucky stand is especially suitable for:

- Orthopedic diagnostics
- Thorax and routine diagnostics
- Trauma and emergency diagnostics

Highlights:

- Motorized height adjustment
- Motorized cassette insert with fully automatic cassette positioning
- Motorized cassette travel in top position
- Motorized variable from 0 degrees to 90 degrees
- Integrated proximity switch
- Synchronization
- Remotely controllable collimator*
- Lateral patient handgrips*
- Patient stretch grip*
- BABIX holder*
- ACSS*



* Option

²⁾ Not offered for sale in the U.S.

POLYDOROS IT 30*²⁾ / 55 / 65 / 80

The new generation of POLYDOROS generators

User-friendly operation via membrane keys or touchscreen:

- Directly selectable organ programs via the body regions shown
- Workstation selection is integrated into the organ programs
- Tube load processor includes X-ray pause display
- External manual exposure release



Touchscreen



Membrane keys

MULTIX PRO/TOP VERTIX Solitaire VERTIX PRO/TOP/S

Technical Data

Patient table	
Tabletop width	80 cm
Tabletop length	240 cm
Table height (motorized adjustment)	59.8 cm to 88.8 cm
Radiation absorption	≤ 0.6 mm Al
Tabletop travel	longitudinal: ± 48 cm; transverse: ± 13.75 cm
Material	compound table top
Table-film distance	53 mm ± 2 mm
Max. patient weight	227 kg (in normal position) (500 lbs)
Ceiling-mounted tube support 3D-TOP	
Travel range	longitudinal: 354 cm; transverse: 222 cm (optional 322 cm)
Vertical travel	150 cm
Focus-ceiling distance	87.4 cm
Tube rotation	about vertical axis + 154°, - 182°; detents every 90° about horizontal axis ± 120°; detent 0°; ± 90°
Catapult Bucky	
Cassette formats	all cassette formats standard according to IEC, DIN, ANSI from 13 x 18 cm to 35 x 43 cm or in inches from 5" x 7" to 14" x 17", vertical and horizontal
Grid	Pb 12/40; $f_0 = 115$ cm
Travel along longitudinal table axis	left 33 cm; right 28 cm (with optional proximity switch 26 cm)
Tube support	
Travel range	160 cm
Tube support rotation	180° (± 90°)
Tube rotation	about horizontal axis ± 120°; detents at 0° ± 90°
Focus-floor distance	≤ 42 cm to 198 cm
Tomographic equipment	
all settings via central operating panel	
Tomographic exposures	planigraphic principle; SID = 115 or 102 cm 40° with 1.2 s and 2.0 s; 30° with 0.8 s; 20° with 0.6 s; 8° with 0.4 s and 0.8 s
Tomographic height	3 mm to 250 mm, digitally adjustable
Tomographic height light localizer*	Indication via light localizer on patient's body in the range from 30 to 250 mm, with monitoring via mirror

* Option
** select when placing order

*** not available on MULTIX PRO, PRO P, TOP, TOP P
1) optional Energy Storage Unit (ESU)

2) Not offered for sale in the U.S.

Collimator

Light localizer, square collimator, manually selectable filters or motorized with ACSS, rails for supplementary filters, measurement chamber for area dose product* can be integrated into collimator, collimator rotatable $\pm 45^\circ$

Bucky wall stand Vertex S

Vertex S	Bucky wall stand, ACSS***
Cassette loading with motorized cassette insert	Right/left operation (indicate when ordering)
Vertical travel	152 cm
Central beam height	38 cm to 190 cm \pm 2 cm above floor
Cassette formats	All cassette format standards according to IEC, DIN,ANSI from 18 cm x 24 cm to 35 cm x 43 cm or inch formats from 7" x 17" to 14" x 17", vertical and horizontal
Grid	Pb 13/70, f ₀ 115, f ₀ 150, f ₀ 180 cm**
Object-film distance	\leq 44 mm
Catapult Bucky	tiltable + 90° / 0° continuously variable
Radiation absorption	\leq 0.55 mm Al

Bucky wall stand Vertex PRO*/TOP*

VERTIX PRO*	Bucky wall stand, ACSS***
VERTIX TOP*	Bucky wall stand, ACSS***
Cassette tray	right/left (indicate when ordering)
Vertical travel	152 cm
Central beam height	38 cm to 190 cm \pm 2 cm above the floor
Cassette formats	All cassette format standards according to IEC, DIN, ANSI from 13 cm x 18 cm to 35 cm x 43 cm or inch format from 5" x 7" to 14" x 17", vertical and horizontal
Grid distances	Pb 13/70; f ₀ 115, f ₀ 150, and f ₀ 180 cm**
Object-film distance	\leq 42 mm
VERTIX TOP	tiltable Bucky grid + 90°/- 20° with detent at 0°
Radiation absorption	\leq 0.55 mm Al

X-ray tube assemblies

	OPTILIX 150/30/50 HC-100	OPTITOP 150/40/80 HC-100*
	Focus 0.6 30 kW	Focus 0.6 40 kW
	Focus 1.0 50 kW	Focus 1.0 80 kW
Heat storage capacity of the anode	450 kJ (600 KHU)	580 kJ (783 KHU)

High-frequency generators

POLYDOROS	IT 30 ^{1)*2)}	IT 55	IT 65	IT 80	LX 50 ²⁾	SX 80
Output in kW (IEC 601)	30	55	65	80	50	80
Exposure voltage	40 kV to 150 kV					
ray tube connection (Dual focus X-ray assembly)	1	1	1	1	2	2
Shortest switch time	1 ms	1 ms	1 ms	1 ms	1 ms	1 ms
mAs area (mAs)	0.5-320	0.5-800	0.5-800	0.5-800	0.5-800	0.5-1000

MULTIX PRO/TOP VERTIX Solitaire VERTIX PRO/TOP/S

Technical Data

Installation data

Line voltage (IEC 038) at the generator	1-phase	110,208,230V, 50/60Hz with energy store (IT)
Line voltage at the generator (IEC 038)	3-phase	400, 440, 480 V, 50/60 Hz (440, 480 V via pre-transformer)
Permitted tolerance for line voltage	± 10%	
Heat dissipation	approx. 300 W	
Ambient conditions (operation)	Temperature range	+ 10°C to + 40°C
	Relative humidity	30% to 75%, below the dew point
	Barometric pressure	70 kPa to 106 kPa

System	approx. weight	Power consumption
MULTIX PRO	680 kg	1.5 kW
MULTIX PRO P	750 kg	1.5 kW
MULTIX TOP	360 kg	1.5 kW
MULTIX TOP ACSS	360 kg	1.5 kW
MULTIX TOP ACSS P	360 kg	1.5 kW
MULTIX TOP ACSS PN	360 kg	1.5 kW
Ceiling stand 3D-TOP	347 – 361 kg	
VERTIX PRO	160 kg	
VERTIX TOP	205 kg	
VERTIX S	170 kg	

Operation



Ergonomics is a key advantage in handling the catapult Bucky. When loading cassettes, there is always extra room, regardless of the format. This is a new standard in user friendliness.



Kick switch – at the top of a user's wish list. Prevents accidental contact with the switches by a patient or accompanying person.



With catapult bucky in table or in the wall stand, you are able in either case to remove the grid for pediatric examinations or change it if for another SID range.

Operation



Motorized filter for ACSS collimation.
The copper filters (0.1 to 0.3 mm) are automatically inserted by the push of a button.



Remote control* Item number 44 83 769

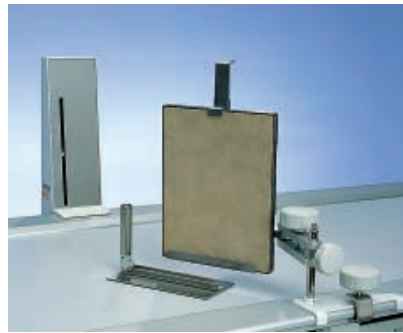


Proximity switch* Item number 44 90 236



Patient stretch grip* Item no. 44 90 590
Patient handgrip* Item no. 44 90 608
BABIX holder Item no. 44 90 582
BABIX U-shaped Item no. 44 30 195
BABIX retainer for U-shaped Item no. 44 30 245

Accessories



Tomographic height light localizer*
Item no. 38 34 004
Cassette holder*, rail-mounted
Item no. 54 77 807
Cassette holder*, freestanding
Item no. 54 78 151



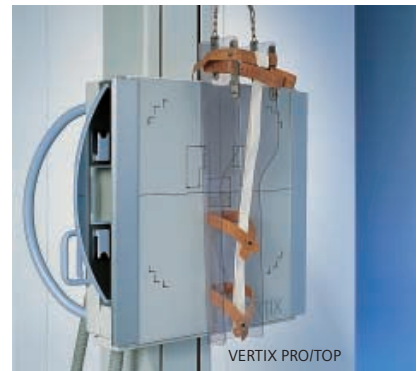
Hand switch* Item no. 86 01 544
Footswitch for table lock*
Item no. 44 30 505
Footswitch for height adjustment*
Item no. 44 34 812



Belt compression
Item no. 98 15 861
Handgrip for patient (standard)



Three-field templates*
Item no. 81 68 494
Holder for 8 supplemental filters
Item no. 83 75 941



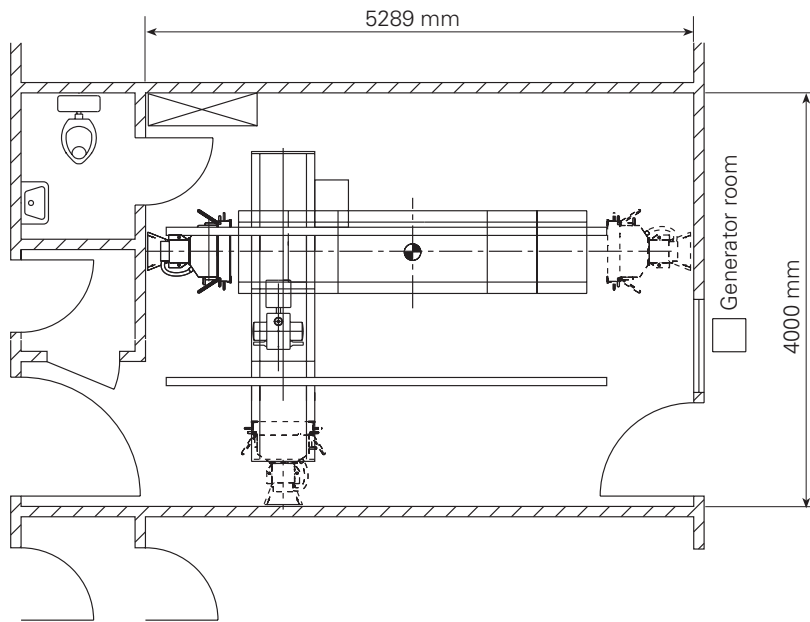
BABIX holder* Item no. 38 34 343
BABIX U-shaped* Item no. 44 30 195
Lateral patient handgrip* Item no. 38 32 552
BABIX retainer* for BABIX U-shaped Item no. 44 30 245



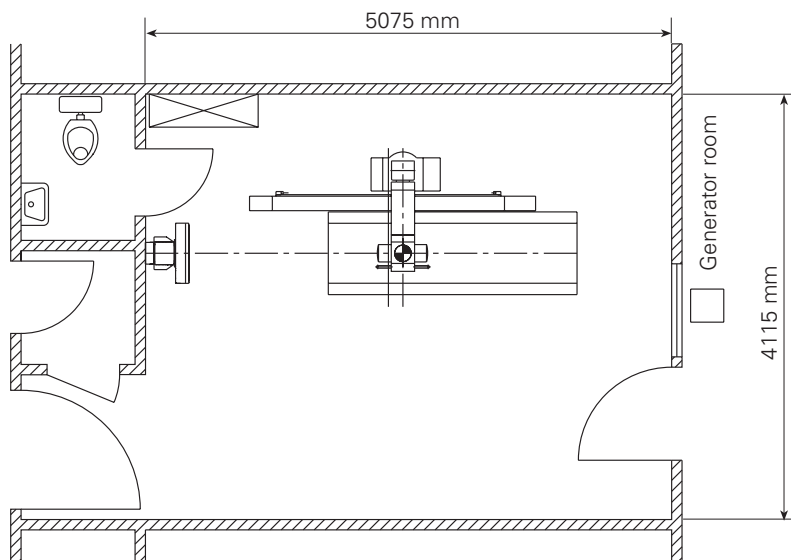
Patient stretch grip* at VERTIX PRO*/TOP*
Item no. 47 97 036

* Optional

Dimensions (mm)



**MULTIX TOP
with VERTIX TOP
(3 var. positions)**



**MULTIX PRO
with VERTIX PRO**

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases.

The required features should therefore be specified in each individual case at the time of closing the contract.

Siemens reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Sales representative for the most current information.

Original images always lose a certain amount of detail when reproduced.

Siemens AG, Medical Solutions
Henkestr. 127, D-91052 Erlangen
Germany
Telephone ++49 9131 84-0
www.SiemensMedical.com

Siemens AG, Medical Solutions
Angiography, Fluoroscopic- and
Radiographic Systems
Siemensstr. 1, D-91301 Forchheim
Germany
Telephone ++49 9191 18-0

Siemens **Medical**
Solutions that help

Order No.
A91001-M1210-G868-4-7600
Printed in Germany
AXMM 08035