



Helianthus 

Performance  
and care  
**all in one**



METALTRONICA

# INNOVATION IS WHAT DRIVES US



## THINKING ABOUT THE FUTURE

**Preventive diagnostics** remains an essential weapon in defeating breast cancer. Metaltronica's forward-thinking design simplifies the technician's operativity, thereby improving workflow, and ensuring that the mammography assessment is a comfortable experience for the patient.

## DAY AFTER DAY

Metaltronica has been supporting physicians in breast cancer prevention for over 40 years, providing high-resolution mammography imaging, with a significant reduction in radiation.

In order to deliver optimal mammography systems for customers worldwide, Metaltronica has put at the radiologist's disposal its vast experience in the field of mammography and the significant know-how of its technical staff.



METALTRONICA

# INTEGRATED MAMMOGRAPHY DIGITAL SYSTEM



The latest addition to the Helianthus series is a **2D low-dose digital mammography system**, equipped with state-of-the-art and most advanced direct or indirect conversion detectors that meet the broadest operational requirements.

Helianthus C is an **ultra-compact** device designed to provide the customer with an advanced mammography system at a **competitive price**, making the transition from the analog equipment (with or without CR) to digital solutions easier.

The well-established ergonomics of the Helianthus family ensures the patient's safety and comfort while, at the same time, providing full support to the operator through the integrated and/or remote acquisition workstation, and the motorized movements (optional) that facilitate its use.

# Helianthus

COMPACT  
CONTEMPORARY  
COMPETITIVE

- ① EUREF COMPLIANT
- ② EXTREMELY REDUCED WEIGHT AND SIZES
- ③ SIMPLIFIED WORKFLOW
- ④ FULL DICOM 3.0 MG
- ⑤ INTEGRATED UPS WITH SAFE AUTOMATIC SHUTDOWN

## WORK SPACE OPTIMIZATION AND FOCUS ON THE ENVIRONMENT

The new design and compact size of Helianthus C ensures safety and **ease-of-use when installed in confined spaces and on mobile units.**

Helianthus C is also unique for its **low power consumption** in stand-by mode, and the optimization of internal components. The X-ray tube with a tungsten biangular anode is lead-free.

# SUPERIOR IMAGE QUALITY

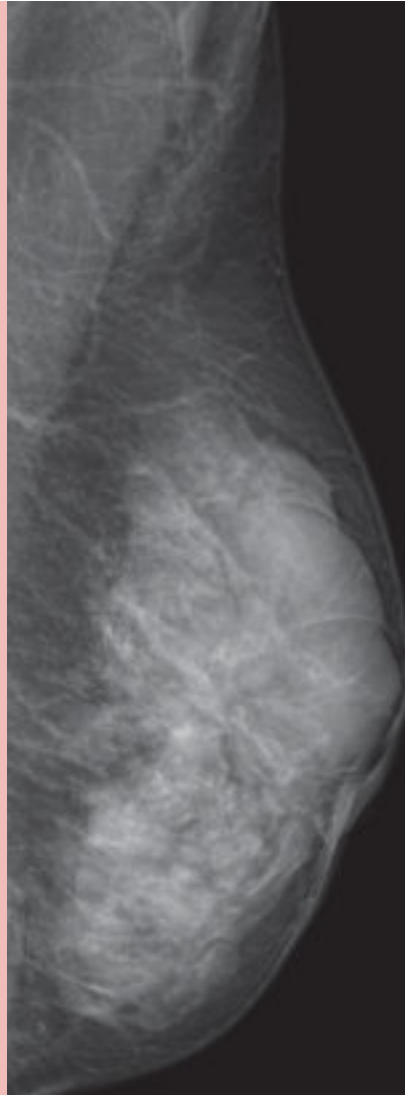
## EFFECTIVE DIAGNOSIS

### **Amorphous Silicon/Amorphous Selenium Detector**

Amorphous silicon is the detector technology chosen to obtain optimal digital imaging without excessive operative restrictions (room operating temperature). Amorphous selenium is the most advanced technological solution used to obtain digital images with the highest signal-to-noise ratio.

### **2D Direct Digital Technology**

Today, direct 2D digital technology represents the Gold Standard in mammographic radiology. To provide an effective diagnosis every detail is critical; **the high quality and accuracy of the image, combined with low dose radiation**, make Helianthus C a reliable device during screening exams as well as in follow-up diagnostic mammograms.



### **POEt SOFTWARE**

Helianthus C is equipped with a powerful "POEt" (**Processing for Optimal Enhancement**) software that **generates excellent quality diagnostic images** which enhance the structure of the tissues of different types of breasts while reducing noise. Extremely versatile, it provides a set of filters, dedicated even to breasts with implants, breasts with metallic markers, anatomical pieces or cores from vacuum-assisted biopsies.



**All-in-one solution**

Acquisition and control station (AWS) integrated into the mammography unit with duplicable and/or remote controls.

**Smart  $\mu$ Press compression system**

Motorized and manual with fine force tuning by means of a dual rotating controller, ensures optimal breast compression with minimal patient discomfort. The FTSE function automatically adjusts the optimal force to be applied based on the density of the breast to be examined.

**Keyboard and Integrated Display on the Potter-Bucky**

the functions of automatic image tagging and display of the projection angle, compression force, thickness and laterality of the compressed breast are at the operator's fingertips.

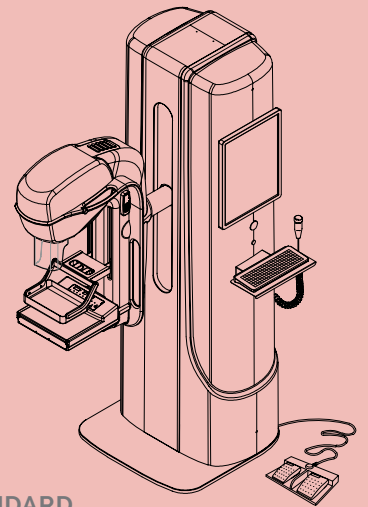
**SENS ROI automatic exposure**

dual operating mode with the selection of exposure parameters based on to the actual density of the breasts (PRE), using the area of the digital detector or according to the thickness (FAST) particularly useful for acquiring with confidence images of breasts with prosthesis.

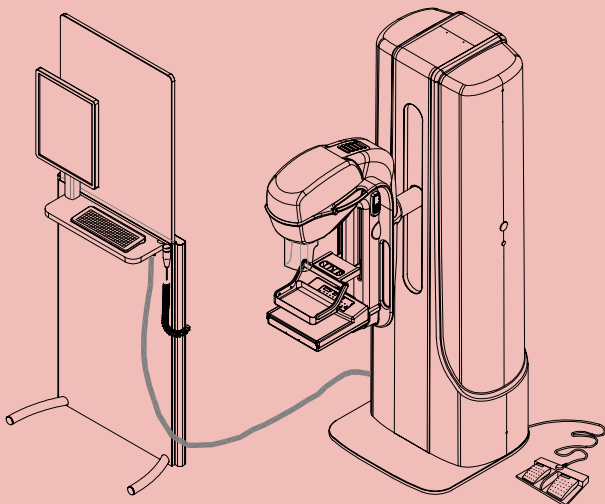
## CONFIGURATION OPTIONS

The Helianthus C series is available in various configurations that include a remote acquisition station consisting of an anti-x semi-transparent screen with monitor and wireless keyboard.

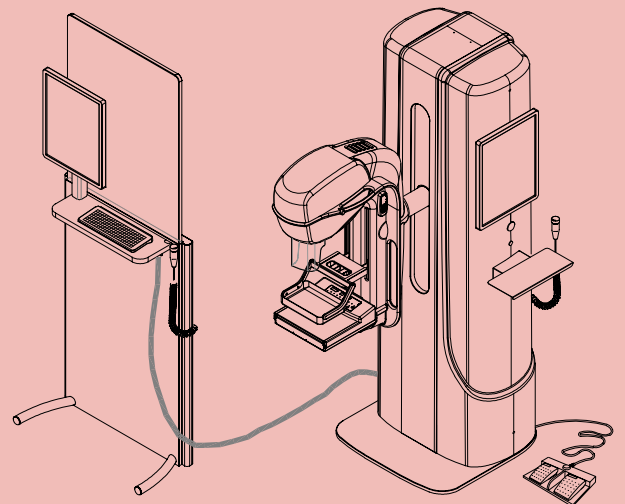
The integration of the acquisition workstation in the Helianthus C mammography unit allows the pre-existing anti-x protections to be reused.



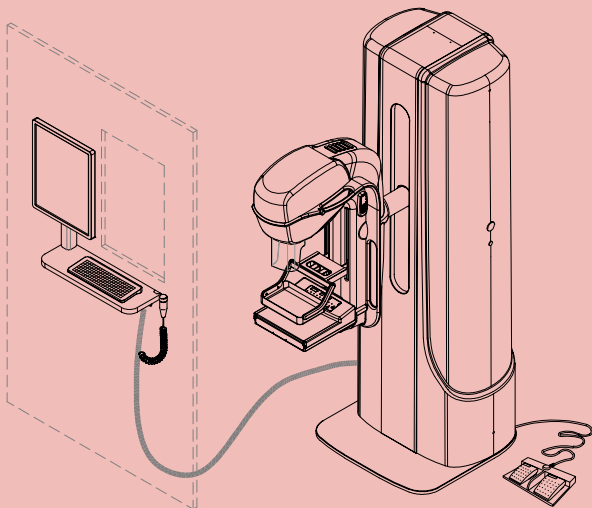
STANDARD



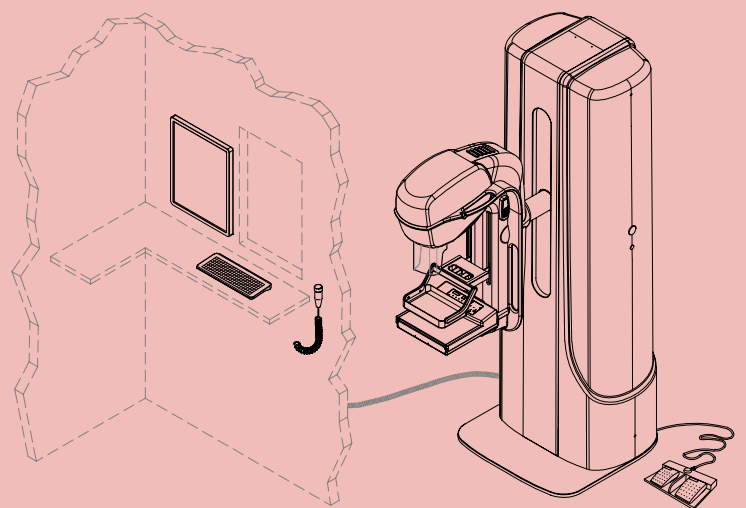
AWS



AWS DOUBLE SCREEN



WALL MOUNTED



FLAT SHELF

# HELIANTHUS C VARIATIONS AND OPTIONS

## HELIANTHUS C BYM

Helianthus C is also available in the Bym version equipped with an isocentric C-arm. The isocentric arm reduces examination time allowing all breast projections to be carried out without adjusting the height of the C-arm or moving the patient. In this configuration, Helianthus can mount the Bym 3D FFDM three-dimensional biopsy device.



## STEREOSTATIC BIOPSY SYSTEM BYM 3D FFDM

Bym 3D FFDM is a digital stereostatic device that can be used with the Helianthus Bym mammography system. It is easily interchangeable with the Potter Bucky and magnification kit.

The control software is integrated in the Acquisition Station and includes a database to select needles, biopsy guns and VAB associated to codes that are selected by the user.

The positioning of the C arm in the angulations required for the biopsy ( $\pm 15^\circ$ ) is motorized.





## GEOMETRIC MAGNIFICATION AND COMPRESSION PADDLES

A geometric magnification device (1.5x or 2x) can be supplied as an option. Without an anti-diffusion grid, it significantly reduces the dose. Once inserted, a detection system automatically selects the small focus and adjusts the collimation set-up.

As an option, a 9x21 cm sized flat compression paddle (to be used with the geometric magnification device), a  $\varnothing$  7.5 cm round sized compression paddle to examine details and a 18x24 cm sized perforated compression paddle for two-dimensional biopsy examinations can also be supplied.



## VISUALISATION AND REPORTING

A dedicated and independent station for the high-resolution visualization of diagnostic imaging is available as an option. It includes: **Workstation with DVD or Blu-Ray burner; Tools to manage, analyse and process images; Dual 5 Mpixel LCD monochrome monitor; Colour LCD service monitor; DICOM 3.0 MG compliance; Interface for HIS-RIS-PACS systems to transfer images and data from/to the hospital network.**

Optionally, the visualization and reporting software can be integrated with a mammography CAD system for assisted diagnosis which, by using appropriately developed algorithms, is a valid tool for the detection of potential breast lesions.

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.



METALTRONICA S.p.A.  
Pomezia (Roma) - ITALY  
Via delle Monachelle, 66  
ph: +39 06 66 160 206  
info@metaltronica.com