The CodyAdvanced Analog/digital mammography systems





radiology ahead

melody mammography: version 3.0

Advanced mammography family

The completely redesigned Melody III mammography line is the best the new technologies and Villa's experience in mammography can offer. Every aspect of the X-ray examination and every characteristic of the mammography unit have been reviewed in depth, making improvements to *increase patient comfort* and the *examination speed* and achieving even greater diagnostic accuracy and operational efficiency standards than in the past. A result that allows us to really be in the front line, side by side with radiologists, in the search for and prevention of breast cancer.

The range of mammography systems is now composed of an analogue model, *Melody III*, and three digital models: *Melody IIID Compact*, *Melody IIID* and *Melody IIID TS* with tomosynthesis; a family of products that allows effectively responding to the various operating, diagnostic and economic needs of healthcare organisations dealing with breast cancer diagnosis and treatment.

Thanks to the use of the latest technological solutions and sharing the same components, all the Melody III models can offer the same benefits in almost equal measure regardless of the image acquisition technology, such as the state-of-the-art *automatic exposure control* which optimises the exposure parameters reducing the dose to be delivered to a minimum, or the two *large control touch-screen displays* which allow the operator to carry out all the operations and view the parameters in a simple and immediate way.

Great attention has been granted to productivity optimisation at the same time improving patient comfort during exam preparation. This result has been achieved by adopting a new isocentric C-arm with precise motorized movements and improving the "Smart Micro Press" compression system with automatic micrometric speed adjustment.







The larger vertical arm excursion allows the system to extend these benefits also to patients with reduced mobility.

The improvement of image quality, another primary goal for Villa, has been achieved thanks to the *increased choice of flat panels available*, an advanced *two-parameter AEC system*, the use of an anti-scatter grid, a perfected image processing program and optional reporting *software with automatic image analysis* tools. The results achieved provide radiologists with greater diagnostic confidence, which also allows improving the performance and productivity of the department.

Finally, in order to solve the difficulties of installation in cramped spaces and on mobile screening units, an ingenious solution has been adopted for the digital variants of Melody III: the *image acquisition workstation* can also be installed on the side of the machine chassis as alternative to a separate station thus minimising the overall volume of the diagnostic system.







melody ** the reference in analogue systems

Analog mammography unit

This new analogue version of Melody III, which shares the characteristics and functions of the digital models, has been raised to a qualitative and functional level never reached before allowing the *best results* and *maximum performance* even in sites where it is not always possible to use digital systems.

Equipped with a *complete range of accesso-ries*, the unit can be configured with bucky for 18x24cm and 24x30cm cassettes or with a cassette holder capable of housing and recognising both formats so as to reduce the preparation time and streamline the workflow.

Not only has provision been made for use of a **stereotactic biopsy module** but Melody III can also be transformed into a digital version thus proving to be a long-term investment.



The stereotactic biopsy system increases the fields of application of the unit. The needle positioning support is easy to install and can even reach lesions in complex positions with great accuracy



Melody III can be integrated with a wide choice of options and accessories, allowing the user to obtain the most appropriate configuration for any specific need. The **range of compression paddles** includes regular and shifted ones, of various sizes and formats.

ergonomics. & reliability



melody IIDC the digital unit for every situation

Compact digital mammography unit

Melody IIID Compact is the ideal "all in one" solution for small diagnostic centres or for screening activities on mobile units as everything necessary for image acquisition is already integrated in its chassis thus making digital mammography even easier and more accessible to all.

Melody IIID C, which does not provide for use of a biopsy module, shares identical functions and characteristics with the other models, such as *two side touch-screen panels* that simplify control of the primary machine functions and a *state-of-the-art compression system* which speeds up the workflow by automatically setting the collimation area in relation to the type of compressor used.

The system can in any case be configured with a separate acquisition station and, as for all digital models, two different reporting solutions can be coupled to it: the **AESTIMAX**TM **workstation**, modular and hence more economical, and **WorkstationONE**TM, extremely complete and with optional CadOneTM software able to identify lesions through artificial intelligence.



The Melody IIID C also offers a variety of options and a complete set of accessories, such as the multifunctional pedal board or the anti-x protection bulkhead, which can be selected when configuring the equipment or purchased later.



The seamless integration of the monitor and image input tools on the side of the equipment streamlines workflow and allows the mammography unit to be installed in small spaces or in mobile screening units.

versatility . & convenience



melody melody the system with lasting value

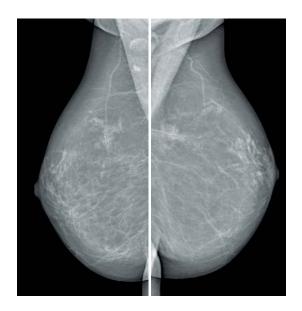
Digital mammography unit

Melody IIID is the model with the most configuration and updating possibilities, designed to best satisfy the various needs a diagnostic centre may have over time.

The system is available with both *amorphous silicon and amorphous selenium detector*, it can be updated in the field to implement *tomosynthesis* and *tomo-guided digital biopsy* functions, and provision has been made for implementation of the optional 'Dual Energy' operating mode.

As well as having all its movements motorized and programmable, like the other models Melody IIID is equipped with an easily *adjust-able decremental compression device* and an automatic exposure control system based on breast density and thickness, which assure *maximum dose reduction* and high patient comfort.

Also Melody IIID can be equipped with the *stereotactic biopsy device* able to extremely precisely calculate and reach the coordinates of the suspect lesion in order to take the specimen; this system, easy to install and use, allows extremely effectively and quickly performing preventive diagnoses and tests.





The Smart Micro-Press compression system relies on an encoder control system, ergonomically positioned on both sides of the C-arm, which can be easily controlled by the operator with one finger. The control ensures high patient comfort.





melody IIDTS mammography at the highest level

Digital breast tomosynthesis unit









Melody IIID TS is the version that operates with tomosynthesis technology, an innovative technique that exceeds the limits of conventional mammography: with a brief scan of the breast, it acquires a sequence of images of thin anatomical sections (slices) obtained from different projection angles, which are processed by advanced algorithms able to reconstruct the volume examined. This technology allows distinguishing with greater clarity and detail suspect anatomical structures that are difficult to identify with conventional mammography because of the overlap of the various surrounding tissues.

Tomosynthesis in Melody IIID TS now has benchmark performance: the scanning angle has been widened to 50° allowing maximum accuracy in identifying the position of low-contrast lesions, while the acquisition times in all three

angles have almost been halved reducing aberrations due to micro-movements of the patient to a minimum. These results, associated with the use of an **anti-scatter grid** and a **fast and precise reconstruction algorithm**, allow obtaining exceptional image quality with better evidence of anatomical detail and possible lesions.

The new *Melody IIID TS* is also offered with an Amorphous Silicon panel thus becoming the point of entry for those that want a system equipped with tomosynthesis at moderate cost. Alternatively, like for Melody IIID, it can be supplied with an Amorphous Selenium panel, also in the 'Fast' variant capable of exceptional image acquisition speed.

Melody IIID TS, if coupled to the dedicated module, allows performing *tomo-guided biopsy* as well.



technology) & performances





radiology ahead

Competence in x-ray systems

Villa Sistemi Medicali is one of the most important manufacturers of radiological systems worldwide. Leveraging more than 50 years of experience in X-ray field, the company's knowhow covers all technologies that can satisfy any need in the X-ray field.

A wide range of equipment

Our range of products includes:

- Digital X-Ray systems
- Remote controlled tables
- Classical tilting tables
- General rad rooms
- Mobile units
- Surgical C arms
- Mammography

Our priority: Technical Service

A wide network of highly qualified and specialized technicians guarantees effective and reliable maintenance of Villa's medical radiology equipment installed anywhere in the world. Our specialist consulting programmes and technical service contracts are defined by our qualified personnel and adapted to the needs of our customers.

Logistic services: a global presence

Villa Sistemi Medicali daily provides full systems, spare parts, accessories and consumables, shipped regularly to all our customers, worldwide, using the most efficient couriers.

Shipment modalities include ground, ship, air and intermodal freight transport.

Villa Sistemi Medicali Spa

Via delle Azalee, 3 20090 Buccinasco - Italy Tel. +39 02 48859.1 Fax +39 02 4881.844 vsminfo@villasm.com www.villasm.com

