

Since 1935 Castellini has been characterised by a combination of tradition and technology. The RXDC and X-VS - X-ViSUS HD technology boost diagnostic capacity, comfort and patient involvement. High definition imaging, low patient doses, versatility and ergonomics ensure an ideal work flow.

Today, Castellini also means RXDC and X-VS - X-ViSUS HD technology: a new frontier in imaging.

Technical Specifications

Sensor X-VS	Size 1 - Regolar	Size 2 - Large
External dimensions (mm)	38.9 x 24.9	41.9 x 30.4
Thickness (mm)	5.3	5.7
Pixel matrix	1500 x 1000	1700 x 1300
Pixel size (µm)	20	20
Maximum resolution (lp/mm)	25	25
Grey levels depth	14-bit acquisition - 16384 maximum grey levels	
Scintillator technology	Csl (Cesium Iodide) with micro-columnar structure	
Direct exposure protection	FOP (Fibre Optics Plate)	
Protection rating	IP 67 (Guaranteed against liquid or dust infiltration)	
Compatibility with X-ray generators	Any AC or DC technology X-ray generator with kV values in the 60 - 70 kV range and precision control of exposure times	
Connectivity	Direct USB to PC	
Acquisition software (for PC)	iCapture con with TWAIN inter	face
Image management software (for PC)	iRYS (for PC) with DICOM 3.0 interface with free viewer and APP for iPAD	
Minimum system requisites		
Supported operating systems	Microsoft® Windows® 7 (SP1) - 8 - 8.1 Professional (64 bit recommended), Microsoft® Windows® 10 Professional 64 bit	
Display settings	1280 x 1024, 1344 x 768 or greater, 16 million colours	
Port	USB 2.0 or subsequent	
Power supply	5 VDC, 500 mA (via USB)	

RXDC X-ray unit

Constant potential, microprocessor-controlled 145 ÷ 230 KHz with self-adjustment (typically 175 KHz) Working frequency

Focal spot 0.4 mm (IEC 336) 2.0 mm Al @ 70kV 4 / 8 mA 60 / 65 / 70 kV(*) Total filtration Anode current Voltage at X-ray tube

0.020 - 1.000 seconds, R'10 and R'20 scale Exposure times Source-skin distance 20 and 30 cm

 $0\,55$ mm and $0\,60$ mm round Irradiated field 35 x 45 mm rectangular, 31 x 41 mm and 22 x 35 mm, for sensors size 2 and size 1 Additional collimators

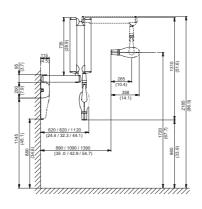
Power supply 50/60 Hz, 115-120Vac ±10% or 230-240Vac ±10%

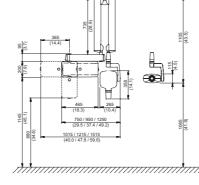
Continuous operation with self-adjustment up to 1s/90s total Available in 3 lengths: 40 cm - 60 cm - 90 cm Duty Cycle Arms (for Standard version only)

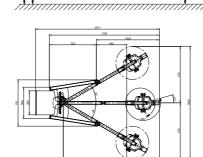
230 cm, from wall CE 0051, FDA approved Max. arm extension Certification

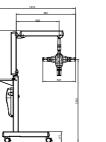
Standard (wall mounted) or Mobile (on portable cart) Versions

(*) values depend on the country where the product is marketed





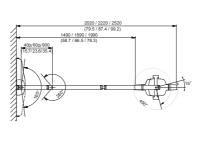




Stabilimento / Plant Via Bicocca, 14/C 40026 Imola (B0) - Italy Tel. +39 0542 653441 Fax +39 0542 653601

Sede Legale ed Amministrativa / Headquarters CEFLA s.c. - Via Selice Prov.le, 23/a 40026 Imola (B0) - Italy Tel. +39 0542 653111 Fax +39 0542 653344

castellini@castellini.com www.castellini.com







RXDC high frequency X-ray unit X-VS intraoral sensor with X-Visus HD technology

The perfect dimension of imaging







Ergonomics and reliability

With its ergonomic design, the RXDC offers simplicity and reliability thanks to solid extruded aluminium arms with an integrated self-balancing system. Arm and tube head positioning is comfortable and stable. The protractor with graduated scale allows easy positioning.

Immediate diagnosis, excellent results.











Made-to-measure sensor

already in the surgery.

X-VS - X-ViSUS HD technology allows users to choose between two sensor sizes, these make it more adaptable to the dimensions of the patient's oral cavity. Outstanding positioning comfort thanks to ergonomic sensors with rounded corners, high performance thanks to compact design and a maximised active area. X-VS - X-ViSUS HD technology also ensures dentists/assistants to remain alongside patients, allowing uninterrupted communication with them.

storage, processing and printing of images in perfect synergy with any other devices

Latest-generation HD sensor

4-layer sensor with an additional protective layer to provide sharp, high-contrast images. Caesium lodide (Csl) scintillator made up of column-like micro-structures that preserve image quality, it first intercepts the X-ray beam and converts it into visible light. The Fibre Optics Plate (a layer of fibre optics) collimates the radiation onto the sensor and protects it against direct X-ray penetration. The high definition (CMOS HD) acquisition device and on-board electronics convert the light into a digital image with 16,384 grey levels.

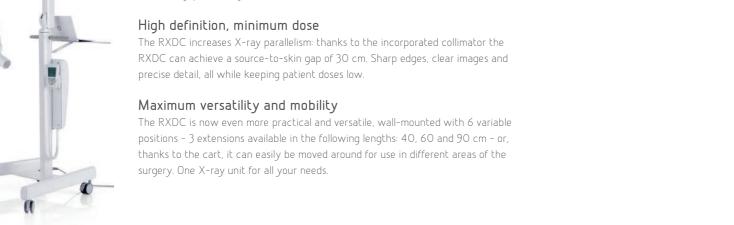












User-friendly control

The RXDC is equipped with a simple, user-friendly handheld device. This is used to select the most suitable programme and ensure perfect X-ray acquisition. Moreover, thanks to the fast Dynamic Duty-Cycle, it is possible to keep tube temperature under control and check - in real time - the exact administered dose.

High clinical potential

The RXDC is a versatile, user-friendly X-ray unit, capable of producing high quality imaging thanks to cutting-edge technology. It also maximises working comfort while ensuring low X-ray doses for the patient and maintaining ultra-high performance. The RXDC, in fact, uses a constant potential high frequency (DC) generator and a very small focal spot (0.4 mm) that provides sharp, detailed images. Automatic exposure parameter modulation and accurate power selection make the RXDC the perfect X-ray unit whatever the situation, personalised according to the patient's build and the specific region of investigation. Optimal results, user-friendliness and maximum comfort. The RXDC is the perfect X-ray unit, capable of combining high quality imaging and a versatile, ergonomic design with low patient doses.



Collimator cones

An embedded collimator cone gives a source-to-skin distance of 30 cm. The optional rectangular cone further reduces the body area exposed to X-rays.

