

TOOTH-CEPH DGM

Direct Digital

Panoramic and Cephalometric Radiographic System

SYSTEM CONFIGURATIONS

Code	Article
97 680 03100	Direct Digital Panoramic & Cephalometric X-ray System
97 680 03200	Direct Digital Panoramic Solo X-ray System

OPTIONAL COMPLEMENTARY ITEMS

Code	Article
76 680 10010	Bite block
76 680 10020	Chin rest
76 680 30050	Temporal Resting bars
76 680 30060	Ear Plug Ceph (set of two)
76 680 10150	Hand Support Ceph
97 680 02000	Self standing base

DIAGNOSTIC PROJECTIONS

Mode	Examination	Exposure Time
Panoramic	Adult standard with constant vertical magnification on dental arch	15 s
	Child at reduced dose	13 s
	Half Dentition Left	8 s
	Half Dentition Right	8 s
	Anterior Teeth	7 s
	TMJ habitual occlusion and opened at maximum extent	4 x 2.5 s
	Frontal View of Maxillary Sinuses	13 s

Mode	Examination	Exposure Time
Cephalometric	Antero Posterior	8 s
	Latero Lateral	10 s
	Carpus	8 s

ANATOMICAL SELECTION

Patients size: 4 positions: small, medium, large, extra large

X-RAY GENERATOR

- Type: Multi-pulse at 40-80 kHz
- Anode Voltage: 61-85 kV $\pm 10\%$, constant potential
- Anode Current: 4-10 mA $\pm 10\%$, direct current (DC)
- Cool Down Time: Automatically controlled with no waiting time under load limit. Variable waiting time to resume from out of limit

TECHNIQUE FACTORS

- kV: Anode Voltage: 9 steps 3kV: 61, 64, 67, 70, 73, 76, 79, 82, 85
- mA: Anode current: 5 steps R10 scale: 4.0, 5.0, 6.3, 8.0, 10.0

X-RAY TUBE

- Focus size: 0.5 IEC 336
- Inherent Filtration: > 3.0 mm Al @ 85 kV
- Leakage Radiation: < 50 mR/h (0.43 mGy/h) @ 100 cm, 85 kV, 10 mA

AIMING LIGHT

- Type: LASER light plane
- Wavelength: 650 nm
- Leakage Radiation: < 0.11 mW at 100 mm
- FDA Classification: Class I

PATIENT POSITIONING

- Aiming Lights:
 - Midsagittal vertical LASER plane
 - Frankfurt horizontal LASER plane
 - Lateral vertical LASER plane on canine
- Normal reference: Bite Block
- Edentulous aid: Chin rest
- Additional support: Tuneable temporal resting bars (optional)

CARRIAGE ADJUSTMENT

- Vertical: Manual movement locked by electrical brake
- Vertical travel: 86 cm (34'') bite point from 89 cm to 175 cm (from 35'' to 68.9'')
- Horizontal: Motorized front-back horizontal displacement
- Access: Can accommodate for wheel chair

IMAGING GEOMETRY

	Panoramic Mode	Cephalometric Mode
• Source-image distance	51.3 cm (20.2'')	165 cm (65'')
• Image magnification at image receptor level	27% Vertical	10%
• Panoramic Slit at receptor level	Adult/Child 6x135 mm	Adult 6x135 mm Child 6x110 mm
• Cephalometric opening at receptor level	N/A	6x220 mm
• Soft tissue filter	N/A	Via Software

DIGITAL SENSOR

	Panoramic Mode	Cephalometric Mode
• Image size PAN	3000x1500 pixel	5000x4000 pixel
• A/D conversion	12 Bits	12 Bits
• Connection	USB	USB

ELECTRICAL POWER SUPPLY

- Power line:
 - 230 V ±10%, 50/60 Hz, 8A, slow blow fuse
 - 115 V ±10%, 50/60 Hz, 16A, slow blow fuse

ENVIRONMENTAL DATA

	Ambient	Transport & Storage
Temperature	From 10 to 40 °C	From -20 to +50 °C
Relative Humidity	From 30 to 75%	From 10 to 100%
Pressure	From 700 to 1060 hPa	From 500 to 1060 hPa

STANDARD AND REGULATIONS

- CE:
 - European Council Directive 93/42/EEC.
 - Medical Device listed in class IIb, with accessories in class I
- IEC:
 - Class I, type B equipment with Class I lasers (IEC 60825-1)
 - IEC 601-1, IEC 601-1-2, IEC 601-1-3, IEC 601-2-7, IEC 601-2-28

DIMENSION

	Panoramic System	Cephalometric Mode
• Column height	220 cm (87'')	220 cm (87'')
• Maximum height	230 cm (90.55'')	230 cm (90.55'')
• Room depth	110 cm	110 cm
• Room width	140 cm	225 cm
• Weight	180 kg (397 lb)	220 kg (529 lb)

