Vatech PaX-i 3D



PaX-i3D

SPECIFICATION (PaX-i3D : PHT-6500)

Function	Pano + CBCT + Ceph
CBCT - FOV Size(cm)	8X8 : Multi [5X5 / 8X5 / 8X8] 12X9 : Multi [5X5 / 8X5 / 8X8 / 12X9]
Voxel Size	0.12 mm / 0.2 mm / 0.3 mm
Scan Time	Pano : 10.1 sec (Normal) Scan Ceph : 12.9 sec (Full LAT -16.9 sec) One Shot Ceph : 0.9-1.2 sec CBCT : Standard_15 sec / High_24 sec

Ceph FOV Size(cm)	SC	21X23 [LAT, PA, SMV, Waters View, Carpus] 25X23 [Full LAT]
	OS	20X20 [LAT, PA] 23X25 [LAT, PA, SMV, Waters View, Carpus]
	OP	20X20 [LAT, PA] 23X25 [LAT, PA] 30X25 [LAT, PA, SMV, Waters View, Carpus]
Gray Scale		14 bit
Patient Position		Standing / Wheel-Chair Accessible
Tube Voltage/Current		50-90 kVp / 4-10 mA

Product Comparison – training purpose only – do not circulate
v.2 /2014

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

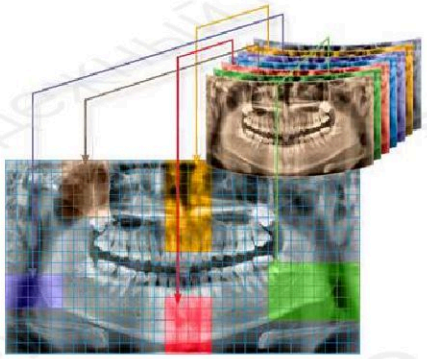
Vatech PaX-i 3D

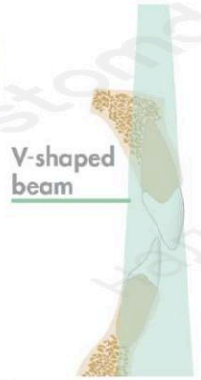




Limitation:

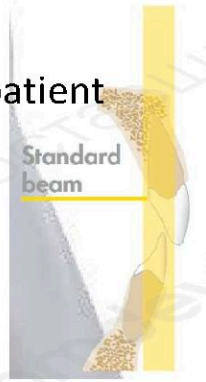
- Leaks Head fixation
- Standard FOV Ø x H (cm): **8 x 8** **(X9 = 11X5 or 11X8)**
  - → Not enough for complete dental arch analysis **(X9=Ø 11cm - enough)**
- Multi FOV (optional) **(X9= MultiFov is Standard, up to 6 fov's)**
- **Lower dynamic range**: 14 bit **(X9 =16 bit)**
- Low 2D performance: Simple kinematic (2 motor) **(X9=advanced kinematic with 3 motors)**
  - → No constant magnification for all trajectory **(X9=constant m. for all the 40 2D images, means images diagnostically better)**
- NO unique relocatable PAN/CEPH SENSOR **(X9=available)**
- **2D Slow Scan**
  - **CEPH 12,9s** (21cm) - 16,9s (27cm) - **(X9 faster=up to 3,6s)**
  - Min **PAN 10,1s** **(X9 faster=up to 6,3s)**





Advantages:

- Magic PAN ("auto focus")
  - (optional) → **X9=New PAN HD Wide Focus as a standard**
  - (CMOS 100 µm) → **(X9 with CCD 48 µm)**
- Available Wide FOV Ø x H (cm): **12 x 9** cm → Only with dedicate sensor (expensive)
  - Ø: 12 cm is useless, does not permit at all to scan TMJ's , it is only more dose for the patient
  - H: 9 cm is not enough to scan Maxillary Sinus **(X9= up to h 13cm with extention)**
- One shot Ceph (option):
  - Size 25 X 30mm → More Expensive
  - Quick Ceph <1s (but **Comparable dose of Scanning type like X9**)



Product Comparison – training purpose only – do not circulate
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Vatech PaX-i 3D Green



SPECIFICATION (PaX-i3D Green : PHT-60CFO)

Function	Pano + CBCT + Ceph
CT - FOV Size(cm)	10X8 : Multi (5X5 / 8X8 / 10X8) 16X10 : Multi (5X5 / 8X8 / 12X9 / 16X10)
Voxel Size	5X5 : 0.12mm / 0.2mm 8X8, 10X8, 12X9, 16X10 : 0.2mm / 0.3mm
Scan Time	Pano : 10.1sec (Normal) Scan Ceph : 12.9sec (Full LAT-16.9sec) One Shot Ceph : 0.9-1.2sec CBCT : 5.9sec (Fast)

Ceph FOV Size	SC	21X23cm (8.3X9.1")[LAT, PA, SMV, Waters View, Carpus] 27X23cm (10.6X9.1")/ [Full LAT]
	OS	20X20cm (8X8") [LAT, PA] 23X25cm (9X10") [LAT, PA, SMV, Waters View, Carpus]
	OP	20X20cm (8X8") [LAT, PA] 23X25cm (9X10") [LAT, PA] 30X25cm (12X10") [LAT, PA, SMV, Waters View, Carpus]
Gray Scale	14 bit	
Patient Position	Standing / Wheel-Chair Accessible	
Tube	50-100 kVp (1 kV step) / 4-16 mA (0.1 mA step)	

Product Comparison – training purpose only – do not circulate
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Vatech PaX-i 3D Green





Limitation:

- Leaks Head fixation **(X9=best head fixation with 7 resting points..)**
- Standard FOV Ø x H (cm): **10 x 8** (X9=**11**X5 or **11**X8)
  - Ø: 10 cm is not enough to get wisdom teeth and for Surgical guide
  - H: 9 cm is not enough to view Maxillary Sinus **(X9=13cm)**
- **Lower dynamic range**: 14 bit =16384 grey shades **(X9=16 bit=65535 grey shades)**
- Low 2D performance: Simple kinematic (2 motor) **(X9=3 motors)**→ No constant magnification for all trajectories **(X9=yes)**
- NO unique relocatable PAN/CEPH SENSOR **(X9=yes)**
- **2D Slow Scan:** CEPH 3,9s **(X9 up to 3,6s)** | Min **PAN 10,1s (X9 up to 6,3s)**
- NO compact Machine (Foot Print 1985mm X 1325 mm)

Advantages:

- Quick 3D scan (but 220°) up to 5.9s:
  - Lower Quality → Low Res. Voxel size 200-300µm **(X9=75 – 150µm)**
  - Higher Dose (exposure time **5,4**s) vs **X9 Std. 3,6s (+50% vs X9 3D)**
  - Magic PAN (Auto focus)→ (optional) vs **X9 New PAN HD Wide Focus**
  - (CMOS 100 µm) → **(X9 CCD 48 µm)**
- Wide FOV Ø x H (cm): **16 x 10** cm or 15 x 15 cm

→ Only with dedicate sensor (more expensive)

- One shot Ceph (option):
  - Size 25 X 30mm → More Expensive
  - Quick Ceph <1s (but Comparable dose of Scanning type like X9)

Product Comparison – training purpose only – do not circulate
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Vatech PaX-i 3D Smart

Product Configuration

	CBCT	PANO	CEPH	
			SCAN	ONE SHOT
PaX-i3D Smart	•	•	–	–
PaX-i3D Smart SC	•	•	•	–
PaX-i3D Smart OP	•	•	–	•

Specifications (PaX-i3D Smart : PTH-30LFO)

Function		CT(with Auto Pano) + Pano + Ceph
Focal Spot		0.5mm
CT FOV Size		10 x 8.5cm / 10 x 7cm
Voxel Size		0.2mm / 0.3mm
Scan Time	CT	18sec
	Pano	13.6sec / 7sec (Optional with Magic PAN)
	Ceph	Scan : 12.9sec / 8.1sec, One-Shot : 0.9sec
Gray Scale		14bit
Tube Voltage / Current		50~99kVp / 4~16mA



Vatech PaX-i 3D Smart -SC/OP





Limitation:

- Leaks Head fixation
- Standard FOV Ø x H (cm): **10 x 8,5**
  - Ø: 10 cm is not enough for Surgical guide
  - H: 9 cm is not enough to view Maxillary Sinus (X9 13cm)
- **Lower dynamic range**: 14 bit
- Low 2D performance: Simple kinematic (2 motor) → No constant magnification for all trajectory
- NO unique relocatable PAN/CEPH SENSOR
- **2D Slow Scan:** CEPH 12,9 (X9 3,4s) | Min **PAN 13,6s** (X9 up to 6,3s)

3D

- Lower Quality → Low Res. Voxel size 200-300µm
- Higher Dose (exposure time **18s CT**) vs X9 Std. CBCT **3,6**s **(+50%** vs X9 3D**)**
- Magic PAN (Auto focus)→ (optional) vs New PAN HD Wide Focus
- (CMOS 100 µm) → (with CCD 48 µm)

• Advantages:

- One shot Ceph (option) SC model :
  - Size 25 X 30mm → More Expensive
  - Quick Ceph <1s (but dose of Scanning type)

Product Comparison – training purpose only – do not circulate
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