

duraSCAN™1417 Product 2021; Rev. 1

Technical Specification

March, 2021

DETECTOR

Imaging Sensor Type	duoPIX™ (TFT based Quasi Active Pixel Sensor)
Conversion Screen	Gd ₂ O ₂ S:Tb
Pixel Active Area	4096 x 3300 (13.5 pixels)
Pixel Pitch	105 μm (Fill the Max)
Active Area Size	430mm x 347mm
Dimension	460mm x 378mm x 15mm
Weight	3.7 kg
Energy Range	40 ~ 330 kVp
A/D Conversion	16 bits
Battery	Built-in Li-ion polymer battery (14,500mAh capacity) 8 hours (over 460 X-ray images @ every 1min shot interval)
Image Storage	1,000 images
Housing Material	Semi monocoque CFRP with aluminum frame
Dead Space	5mm on bottom & right edges
Handle	Detachable handle; portrait and landscape (2 sides)
Ingress Protection Code	IP67
Temperature (Operating)	-20°C ~ 55°C
Humidity (Operating)	10 ~ 100% RH
Drop Tested	1 meter drop resistance
Weight on panel	Point 150 kgf @ ϕ 40, Whole 300 kgf

COMMUNICATIONS

Number of Antennas	3 flat antennas
Status Display	OLED display (IP address, WiFi, LAN, battery indication)
Data Output	Gigabit Ethernet
Wireless Data I/F	802.11a/b/g/n/ac WiFi standard at 2.4/5GHz
Wireless Performance	5GHz: 54Mbps @100m distance 2.4GHz: 12Mbps @30m distance
Boot-up Time	10 sec
Image Acquisition Time	Wired: 0.5sec, Wireless: 1.5sec
X-ray Interface	Automatic Exposure Detection

	Wired Trigger Connection
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IMAGING PERFORMANCE

Nyquist frequency	4.76 lp/mm
Image Lag	< 0.1%
Long Exposure Performance (Not Image Processed, Real & Physical)	180sec (no loss of dynamic range) 350sec (< 35% of dynamic range loss)

POWER SUPPLY UNIT

Power Supply	Input AC 100/240VAC, Output DC 12V 50~60Hz
Dimension	234mm x 130mm x 55mm
Weight	0.9 Kg
Programmable Output for Trigger	1 port

REGULATORY

Standards	ISO 60601-1-3, ASTM E2597-07, IEC62220-1-1
Certificates	CE, UL, FCC, KC

Definition

duoPIX™:

- Composes of 2 of TFTs and photodiode; one TFT is for readout and the other TFT is for pixel reset maximizing image dynamic range by suppressing increase of dark offset.
- Exclusively patented by Biosenstech Inc.

Fill the Max:

- Pixel architecture with maximizing fill factor

