

Wireless Intraoral Sensor

DCiS/ DC-Air®/ Athlos-Air®/ Athlos-1



Technical Specifications

Detector	single crystal direct conversion silicon/CMOS
Pixel physical size	26 um
Exposure Parameters	0.05 to 0.5s, 60 to 70kV, 2-8mA
Active Area	35.1 x 24.7mm ²
Gray scale depth	16 Bits
Number of Pixels	1,249,920
MTF	>70% @ 5lp/mm >40% @ 10lp/mm



Docking Station Power

Input Voltage	+5V ± 10%
Input Power (Max)	2.5W



Sensor Battery

Type	Lithium-Ion
Capacity	32 mAh



Features

Sensor mode of operation	global shutter
Triggering	automatic on X-ray start
Safety: Onboard storage memory	1 image
Range	up to 3 m
Recharge Cycle	up to 10 hours (up to 300 X rays)
Accelerometer	N/A
Battery gauge	Yes
BLE location services for device finding	Yes, while sensor is powered
Trigger to display time	about 6 seconds
BLE Rx Sensitivity	-89 dB
Docking station	Magnetic docking for robustness and easiness

DCiS/ DC-Air®/ Athlos-Air®/ Athlos-1 Wireless Intraoral Sensor features a universal size 1.5 digital X-Ray imaging sensor ideal for Dental Intraoral diagnostics. DCiS / DC-Air®/ Athlos-Air®/ Athlos-1 is suitable for general populations. DCiS / DC-Air®/ Athlos-Air®/ Athlos-1 utilizes Direct Conversion Technology. It is intended to be used for a radiographic examination by a dental professional to assist in the diagnosing of diseases of the teeth, jaw, and oral structures.

DCiS/ DC-Air®/ Athlos-Air®/ Athlos-1 utilizes Bluetooth® Low Energy (BLE 5.0) Technology to transfer the captured x-ray image to a Docking Station which further relays it to a connected diagnostics PC. No bulky, cumbersome, and uncomfortable wire. Freedom. The BLE 5.0 wireless Intraoral Sensor provides the speed of corded sensors, the comfort of phosphor plates, a result of getting rid of the wire and utilizing the Zero Profile® holders, the unprecedented Image Accuracy (IA) of direct conversion and the workflow benefits of Truly Wireless® connectivity.



Interfaces

Radio	Bluetooth © Low Energy (BLE 5.0)
Wired	USB 2.0 High Speed
Connector Type (Docking Station)	USB-C
Cable Type (Docking Station to PC)	USB-C to USB Type A



Environmental

Ambient Operating Temperature	+10°C to +40°C
Transportation Temperature	-20°C to +50°C
Storage Long Term	0°C to +40°C
Humidity (non-condensing)	30%RH - 95%RH
IP Protection Level	enhanced IP67
Agency rating	ISO 10993
Encapsulation	robust ultrasonic bonding
Encapsulation material	PPSU with exceptional hydrolytic stability and toughness



Software (OEM Integration)

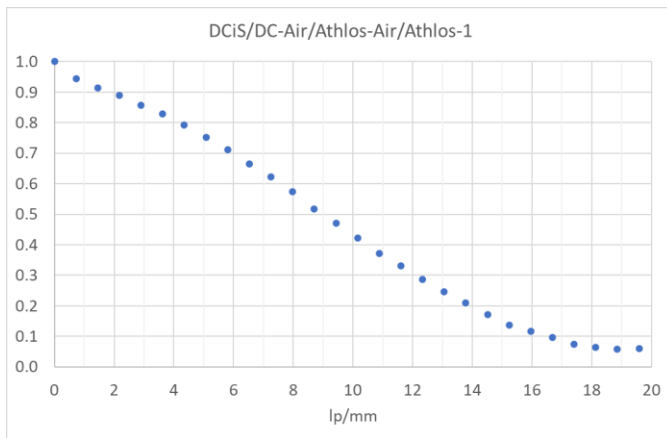
Athlos SDK, including source code examples for integration and advanced locally adaptive filters.

The format of the calling functions is defined in C++ language.



Software (End User)

Optimized single layer TWAIN interface Supported imaging software: Dentrix Ascend, Eaglesoft, Open Dental, Dexis, TigerView, Romexis, Acteon, Apteryx, tab32, MOGO, Dovetail, Curve Dental, XDR Radiology, TDO, VistaSoft, Theia, DentalEye, ArchiMED suite and many more TWAIN enabled software.



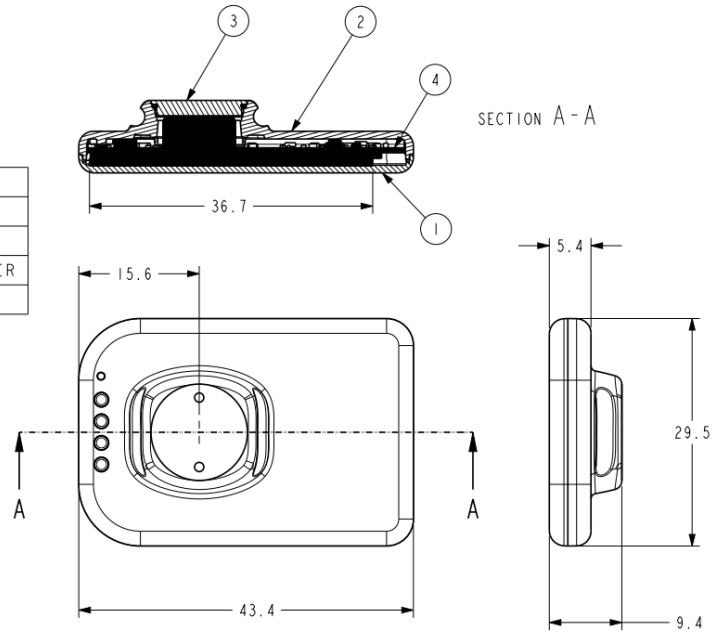
Modulation Transfer Function: Image Accuracy (IA)

WIOS-S2

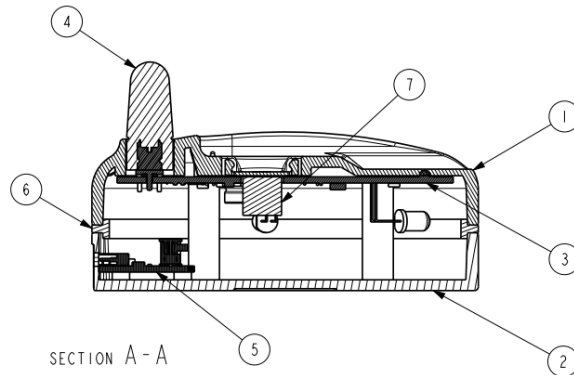
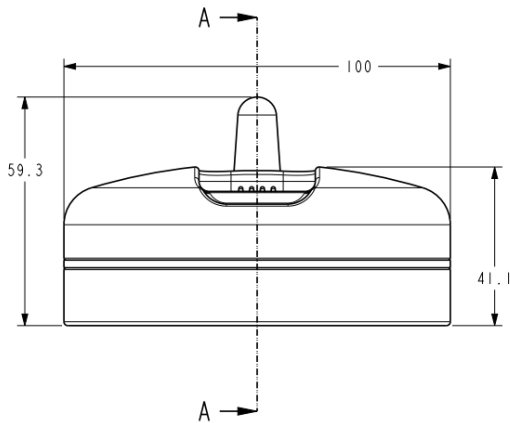
ITEM NO	PARTS LIST TABLE
1	TOP COVER
2	BOTTOM COVER
3	GOLD PLATED BATTERY COVER
4	ELECTRONICS ASSEMBLY



SCALE 1/1



WIOS-DS2



ITEM NO	PARTS LIST TABLE
1	DOCKING STATION HOUSING
2	BOTTOM COVER
3	ELECTRONICS PCB ASSEMBLY
4	ANTENNA
5	USB-C PCB
6	LIGHTGUIDE
7	MAGNET