

Ray America



RIOSensor +

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RAY IO Sensor line-up

Ray America

Features	RIOSensor+	
Sensor size	Size 1	Size 2
True resolution(lp/mm)	24	
Theoretical resolution(lp/mm)	26.3	
Technology	Super CMOS + OpticFiber + Csi	
Active area(mm)	22.2 x 29.6	26.6 x 35.5
Pixel matrix(mm)	1168 x 1562	1402 x 1874
Pixel size(μm)	19	
Thickness(mm)	7.3	
USB type	USB 2.0	
Case dimension(mm)	27.6 x 37.7	32.2 x 44.2
Cable length(m)	~3.0	
Fiber optic layer	Best	
Submersible	Best	
Various Imaging processing	Best	
Powerful TWAIN/SDK Integration	Best	
Strengths	• High true resolution images 24 lp/mm • Various image filter • Fiber optics - protect detector from x-ray • Designed to withstand shocks, drops, and pulls • Submersible	

Key features

Ray America

Exceptional image quality

24 lp/mm true resolution

Design for durability

Reinforced casing to resist shock

Uniquely waterproof

Fully waterproof sensor

Imaging processing tools

Pre-programmed anatomic enhancements

Improved ergonomics

Cable wires are lined with Teflon to reduce friction

Enhanced workflow

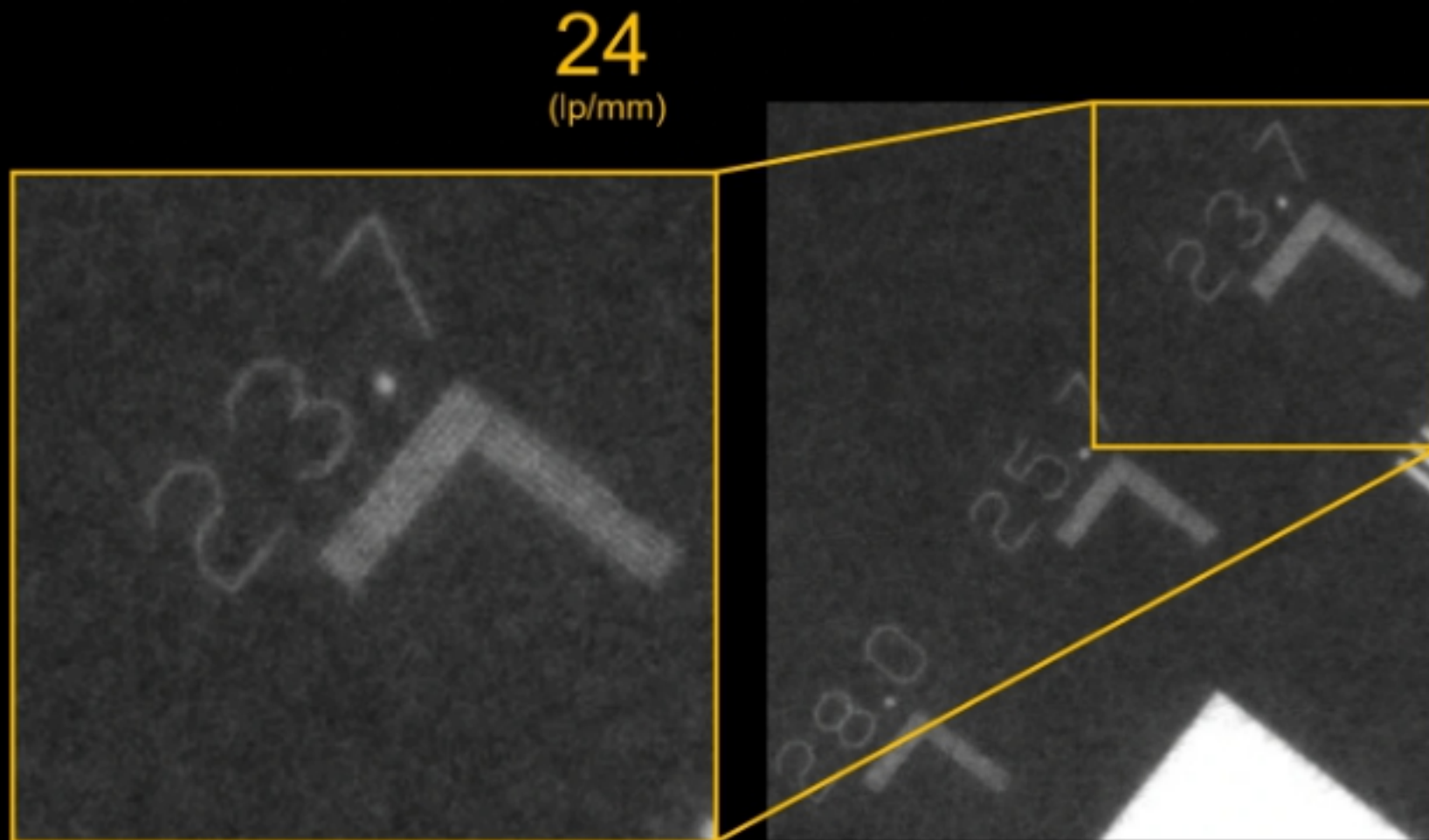
TWAIN compatible with major imaging software



1. Exceptional image quality

True resolution 24 lp/mm

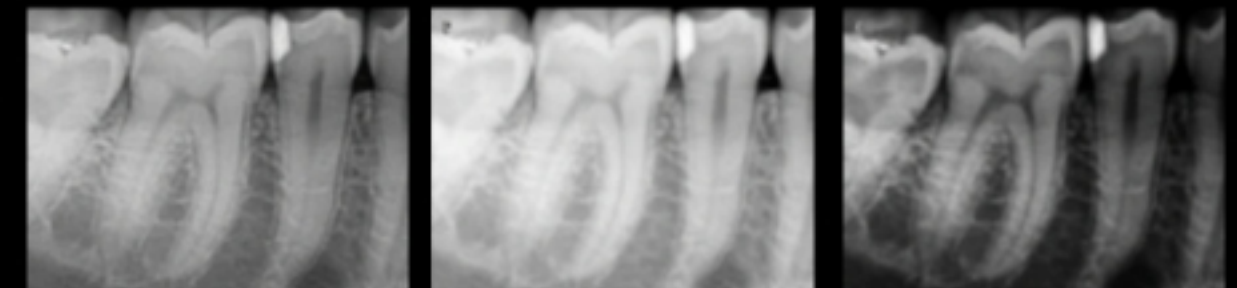
- True resolution 24 lp/mm
- Produces images with exceptional details and clarity
- Provides high-quality images with maximum diagnostic accuracy



2. Imaging processing tools

Various image enhancement modes

- Pre-programmed anatomic enhancements
 - Endo, Perio and DEJ filters
 - Optimize image contrast according to diagnostic
- Sharpness increased/decreases contrast



Endo

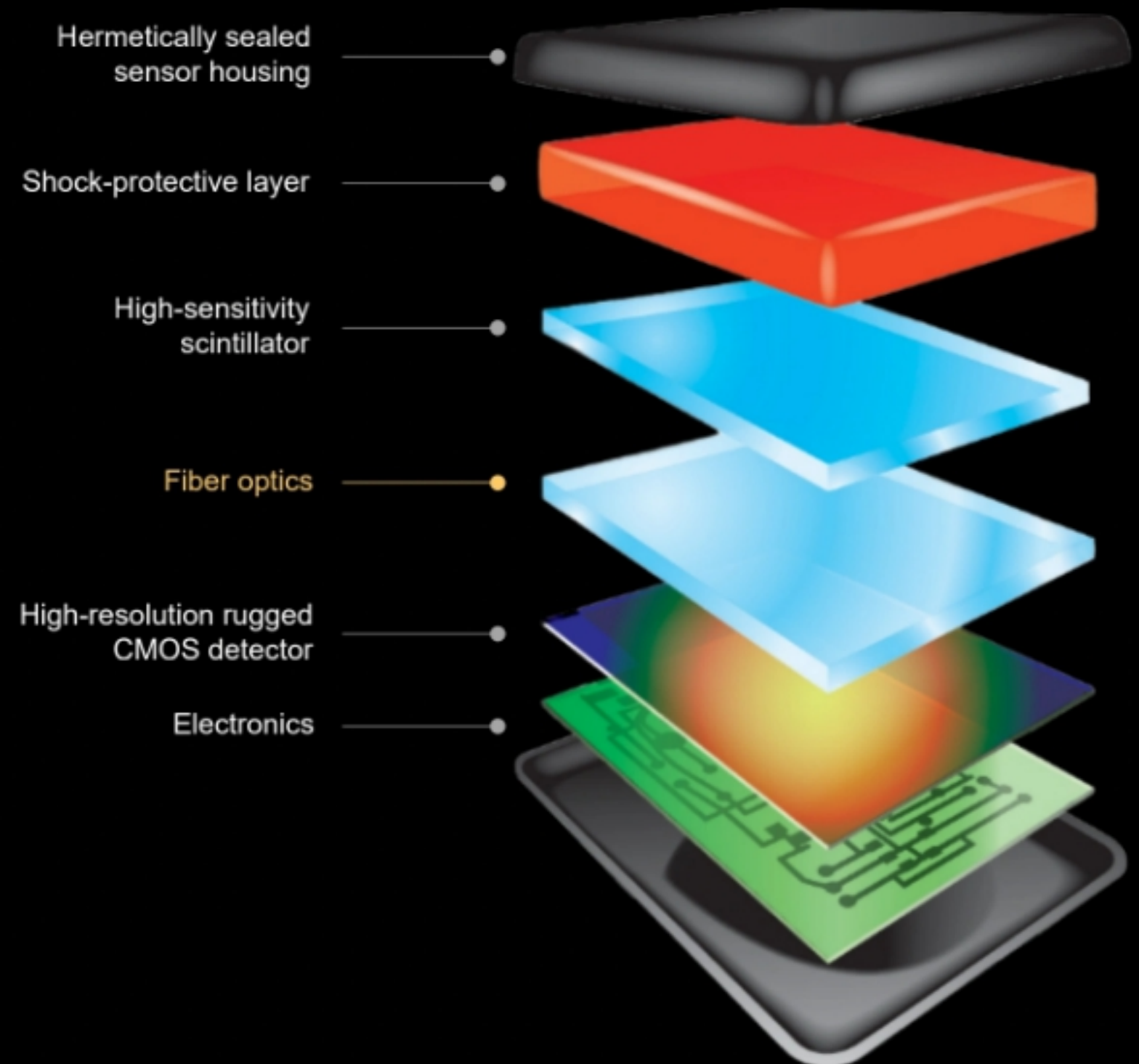
Perio

DEJ filters

3. Design for durability

Built-in parts for strength

- Reinforced casing to resist shock
 - Shocks, Bites, Drops
- Fiber optics
 - Protect detector from x-ray
 - Allows for an unlimited number of exposures to the sensor

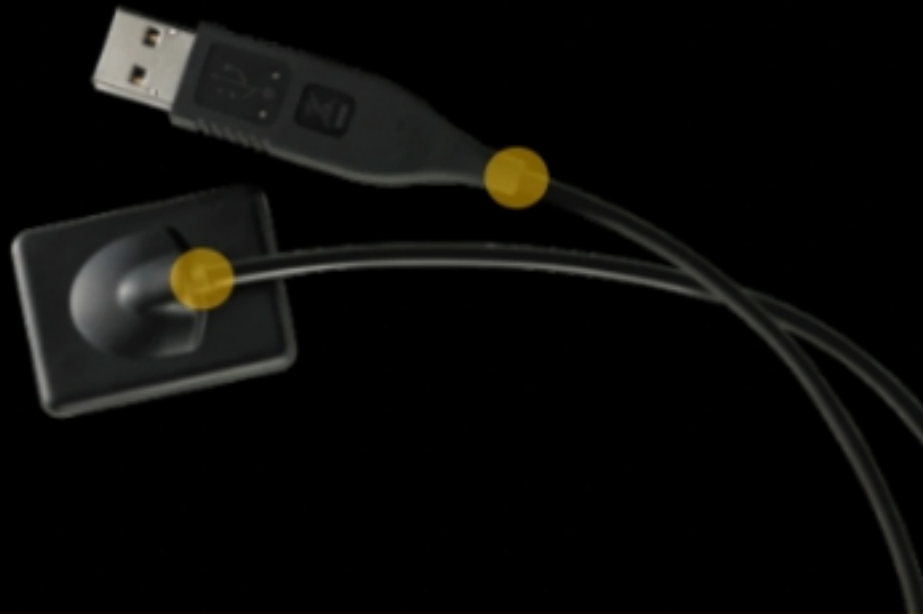


3. Design for durability

Powerful hardware for long-term use

- Reinforced cable connection points
 - Sensor cable attachment
 - USB plug connection
- Cable testing
 - A new, securely attached flexible cable can withstand tens of thousands of manipulations - more than 10 years of intensive use
 - Force testing
 - Flexion testing

Reinforced
connection points



Cable tested with
7 kg weight



4. Improved ergonomics

Design structure considering patient usability

- Newly designed cable
 - Cable wires are lined with Teflon to reduce friction
 - 20% thinner diameter reduction in cable thickness
 - The weaving of alloy mesh cable shielding is optimized for flexibility
- Improved flexibility

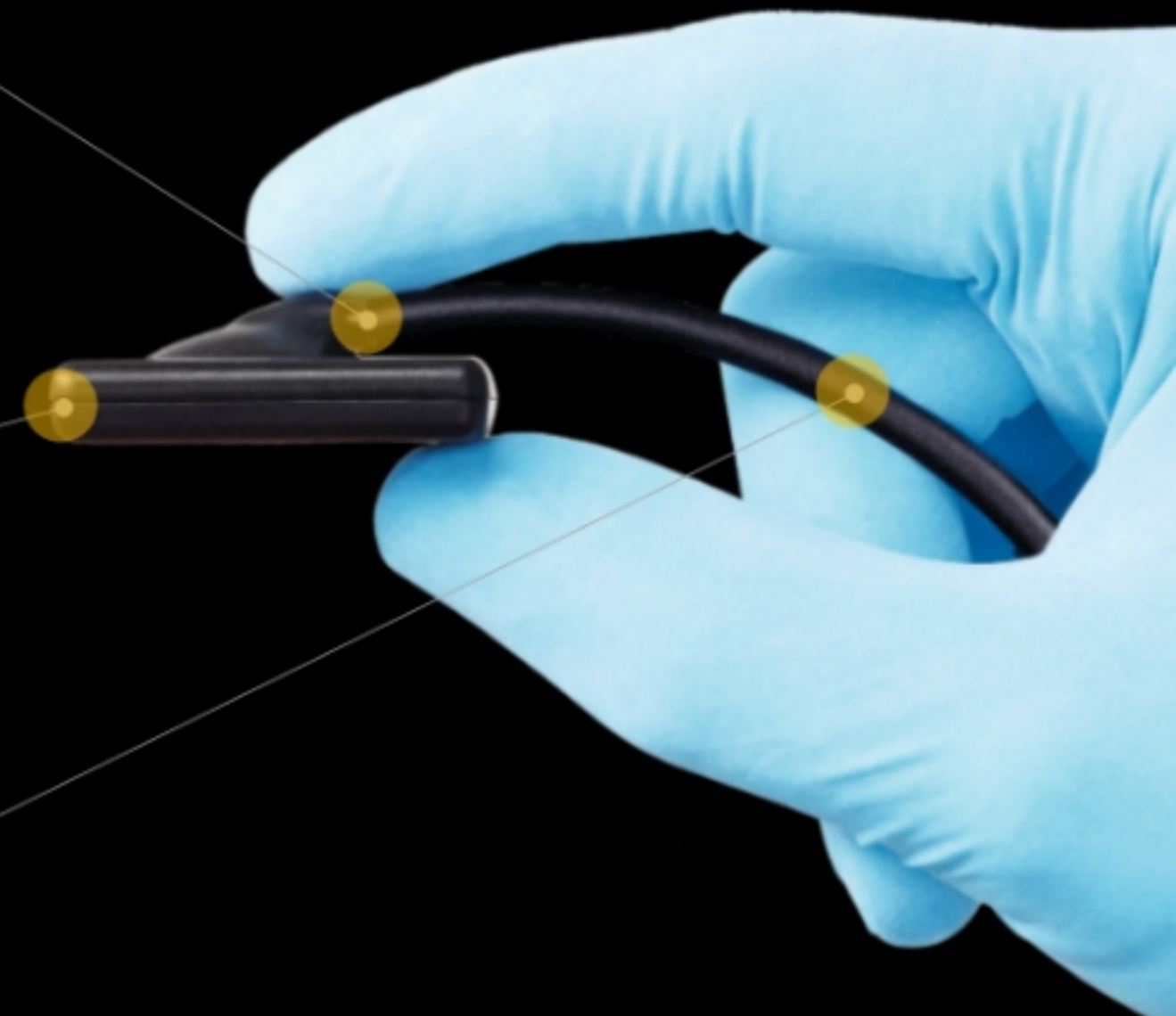
More compact



Rounded corners



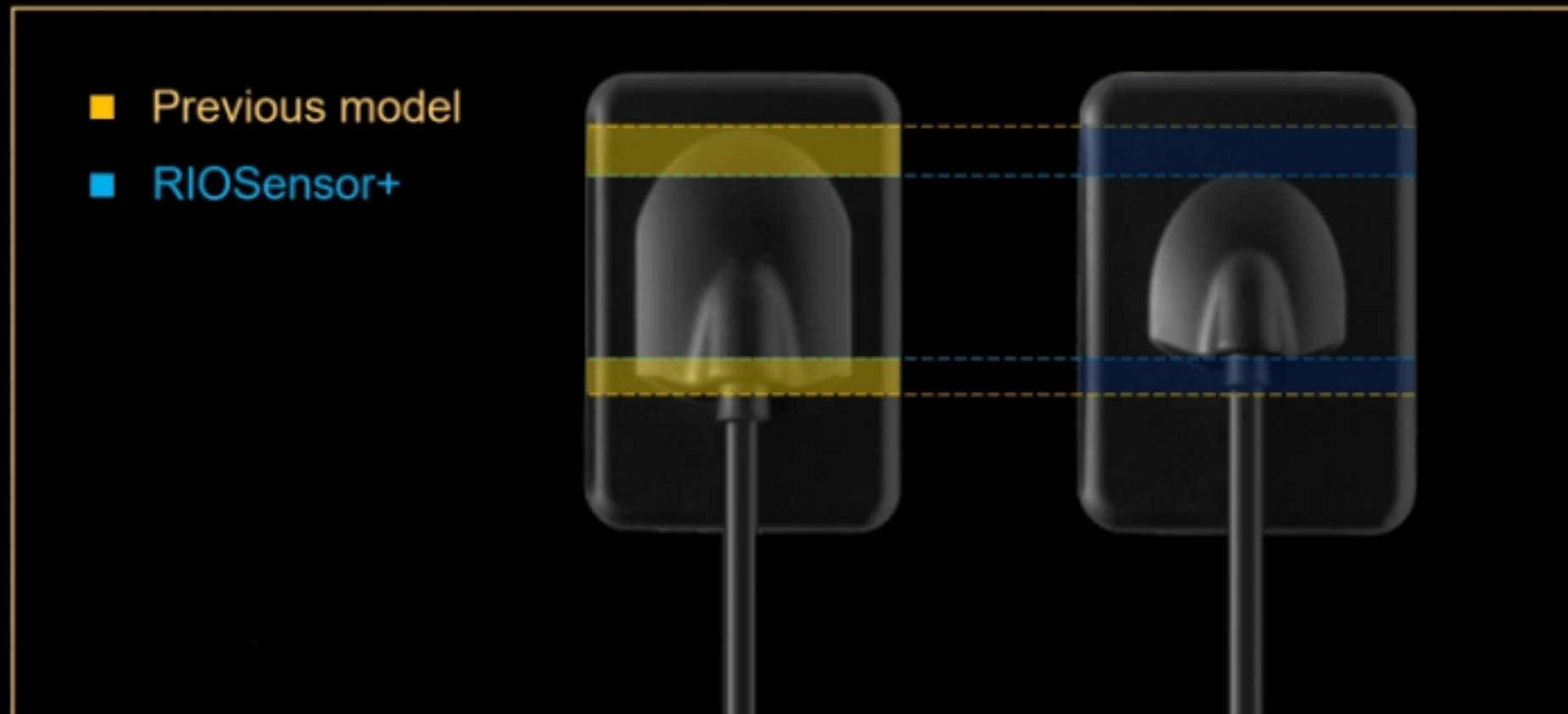
20% Thinner cable



4. Improved ergonomics

Significant ergonomic benefit

- Ergonomically designed rear cable entry
 - Significantly smaller cable housing compared to previous generation sensor
 - Reduced bulk for improved patient comfort
 - Easier placement and positioning of sensor improves image acquisition
- A flexible wire combined with a smaller cable housing provides significant ergonomic benefits



5. Uniquely waterproof

Fully waterproof sensor

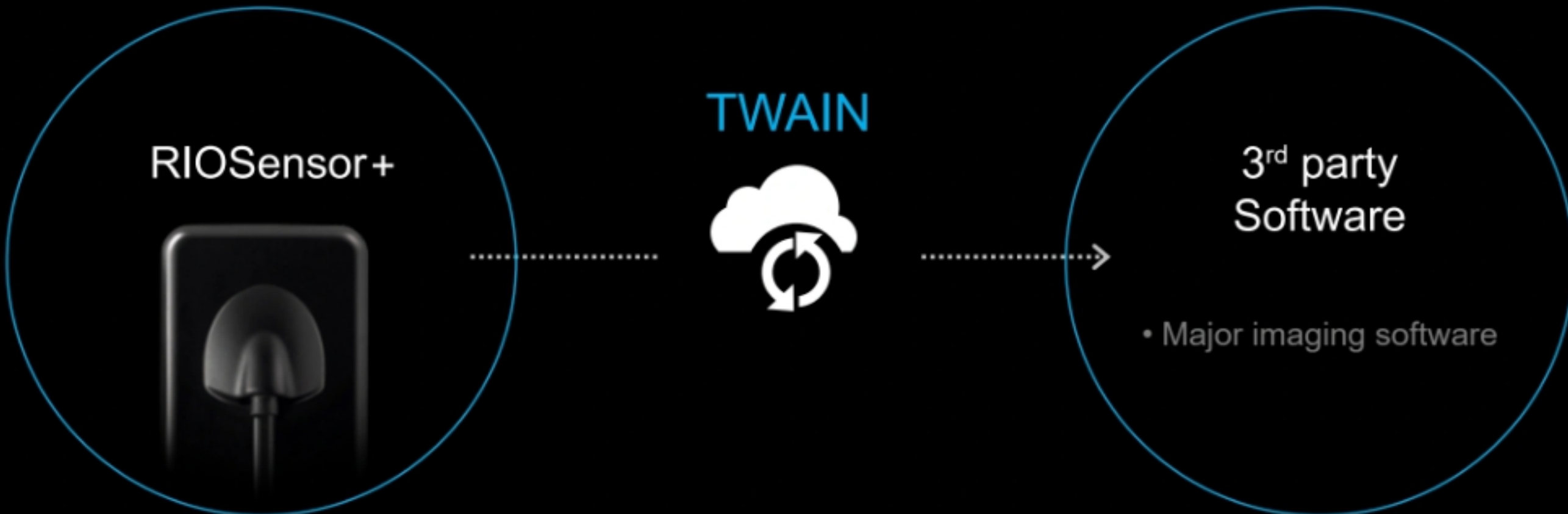
- Uniquely waterproof
 - 24 hours water immersion test
 - Test ensures the sensor is both airtight and watertight
 - The airtight design further protects the CMOS sensor
 - Fully waterproof sensor supports immersion in disinfecting solution for enhanced hygiene and safety



6. Enhanced workflow

Compatible with 3rd party software

- TWAIN compatible
 - Simplifies implementation
 - Allows for multi-sequence acquisition with TWAIN compliant 3rd party imaging software
 - Allows customers to continue using existing TWAIN compliant software
- Integration with major imaging software



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