

# RADIANCE® ULTRA ZEROWIRE® 4K 32"

- Breaking new ground, the first medical grade 4K wireless imaging solution
- Low-latency performance with cable equivalent image quality
- Interference immune 60 GHz transmission ensures in-room containment
- All-in-one, dual-function, embedded transmitter and receiver
- Intuitive, memory enabled pairing, enhances ease-of-use
- Security encrypted signal ensures patient privacy
- Benefits from the Radiance Ultra's color accuracy and brightness







# **EXPANDING THE POSSIBILITIES IN 4K VISUALIZATION, WIRELESSLY**

The ground-breaking ZeroWire 4K display represents a technological leap forward in OR imaging solutions. With the adoption of 4K in today's digital OR, ZeroWire 4K extends your imaging chain without the restrictions, safety concerns, and costs of a 4K cabling infrastructure. By integrating exclusive 60 GHz wireless technology into NDS's 4K imaging platform, a new gold standard in surgical visualization is attained.

ZeroWire 4K's 60 GHz technology delivers a robust and reliable turn-key wireless video system. Dual-functionality has been achieved by embedding both transmitter and receiver into each display. Once linked, a pair of ZeroWire 4K displays will auto-link after power cycles.

Beam steering antenna technology dynamically controls the wireless signal to avoid obstructions and optimize wireless performance even in the most challenging procedure room conditions. Free of perceivable latency or visible artifacts, the system provides the pristine 4K image quality that clinicians demand. The OR staff can benefit from enhanced safety and ergonomics by eliminating cables and enabling greater flexibility.

To experience the ultimate in cable-free wireless operation; combine the ZeroWire 4K display with the NDS ZeroWire Mobile stand. This combination eliminates the need for all cabling thus reducing room turn around time.

#### **TECHNICAL SPECIFICATIONS**

WIRELESS			
Frequency Range		60 GHz Band (57-64 Ghz)	
Wireless Functionality		Transmit or Receive (Dual Function)	
Wireless Video Inputs (In Tx Mode)		12G-SDI-1 & 2, HDMI-2 & 3*, DisplayPort-2	
Video Output (In Rx Mode)		Screen-Clone on 12G-SDI-1 Out of Rx monitor	
Systems Latency (Tx toRx)		Less than One Frame (<16 ms at 60Hz)	
Wireless Transmission Range		30 feet (10 meters) Maximum	
Number of Pairs Per Room		Up to Two Monitor Pairs	
Pairing Method		Memory Enabled Pairing	
Patient Privacy Data Protection		256-bit AES Encryption	
Transmitter/Receiver Mode Control		Auto-Set Based on Input Source	
Transmitter/Receiver Mode		LED Indicators on Front Bezel	
IMAGE PERFORMANCE			
Screen Size (Diagonal)	32.0 ii	nches (813 mm)	
Native Resolution (H x V)	3840 x 2160 (4K/UHD)		
Aspect Ratio	16:9, UHD		
Luminance	700 cd/m² (Typical)		
Contrast Ratio	1350:1 (Typical)		
Medi-Match™ Calibration	BT.709, BT.2020 Emulation		
Number of Colors	1.07 Billion (10-bit)		
Color Gamut	149%	of BT.709, 79% of BT.2020	
Response Time	8 ms	(Typical)	
Display Latency	Less t	han 5 ms (Typical)	
GENERAL			
Input Power	24 Vo	lts DC (Min. 21.6 Volts)	
Dimensions (W x H x D)	30.7"	30.7" x 20" x 3.4"/780 mm x 509 mm x 87 mm	
Protective Front Panel	AR Co	AR Coated, Chemically Strengthened Glass	
Scratch Resistant Guarantee	Yes		
Warranty	3 Year	3 Years	
Ingress Protection (IP Rating)	IP46 front, IP32 Rear		
Mounting	200 x	200 x 100 mm VESA	
Display Weight	32.0 lbs (14.5 kg)		
Shipping Weight	45 lbs (20.5 kg)		
Shipping Dimensions	36" x 9	9" x 29"/92 x 23 x 74 cm	

CONNECTIVITY	SIGNAL TYPE	CONNECTOR	FUNCTIONALITY
4K/UHD Inputs*	12G-SDI-1	BNC x 1	Can be Transmitted to Rx
	12G-SDI-2	BNC x 1	Can be Transmitted to Rx
	HDMI-1 (1.4b)**	HDMI Type-A	Displayed on Screen Only
	HDMI-2 (2.0)**	HDMI Type-A	Can be Transmitted to Rx
	HDMI-3 (2.0)**	HDMI Type-A	Can be Transmitted to Rx
	DisplayPort-1	DisplayPort	Displayed on Screen Only
	DisplayPort-2	DisplayPort	Can be Transmitted to Rx
4K/UHD Outputs	12G-SDI-1	BNC x 1	Screen-Clone in Rx mode
	12G-SDI-2	BNC x 1	Re-drive Only
HD Inputs	DVI-D	DVI-D	Displayed on Screen Only
HD Outputs	DVI-D	DVI-D	Re-drive Only
Control Input	RS-232 Serial	RJ-11	Serial Command Interface
ACCECCODIEC			•

#### **ACCESSORIES**

Included Accessories	24 VDC Power Supply, region appropriate AC power cord, Download Information for User Manuals
Optional Accessories	DC Power Extension Cables: 10 ft (90Z0287), 50 ft (90Z0288) RS-232 Adapter Cable - DB-9 to RJ11 (90Z0245) DVI Out to 5 Volt DC Cable (90Z0274)

#### **REGULATORY COMPLIANCE**

ANSI/AAMI ES60601-1, CAN/CSA C22.2 No. 60601-1, EN 60601-1, EN 60601-1-2, Conflict Minerals, FCC Part 15 Class A, ICES-003, VCCI V-3, MDD Class I, FDA Class II, FDA 510(K) Cleared, including RF module model SII-SK63102 and SII-SK63101, (RE-D) Directive 2014/53/EU, EN 302-567 V2.0.24, EN 301 489, CE, FCC ID: UK2-SII-SK6310 and UK2-SII-SK63102, IC ID: 6705A-SIISK63101 and 6705A-SIISK63102, 007AA106

#### **ORDERING INFORMATION**

90R0130 Radiance Ultra ZeroWire 4K 32"

# CONTACT INFORMATION

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## NDS China Office

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Display On-Screen Only

Wireless Capable Inputs 24VDC DVI-D DVI-D HDMI 1 Neutrik RS-232 DisplayPort 1 DisplayPort 2 Input (4K 30Hz) Connecto (XLR) 12G-SDI 2 Input HDMI 3 12G-SDI 1 HDMI 2 Input Input Input (4K 60Hz) Input Input (4K 60Hz) 12G-SDI 2 12G-SDI 1 Output

\* 4K/UHD capable inputs also support HD resolutions

INPUT/OUTPUT CONNECTOR PANEL

\*\* HDMI inputs support DVI-D signals up to 1080p via a DVI to HDMI adapter cable (not included)

NDS Quality System ISO 13485 FDA Registration #2954921 Document 72S0004 rev A

