Infiniium UXR-Series Oscilloscopes

The Most Advanced Real-Time Oscilloscope on the Planet

Introduction

Keysight Infiniium UXR-Series oscilloscopes deliver world-leading performance, ultra-low noise, and the highest signal fidelity available today, so engineers and scientists can truly see and understand even the fastest phenomena – enabling you to develop next generation of technology and research more quickly.





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NOTE:

For a description of key features, see the Infiniium UXR-Series Oscilloscopes Technical Overview.

For a detail of specification, see the Infiniium UXR-Series Oscilloscopes Data Sheet.



Configure Your Ultra-High-Performance Real-Time Oscilloscope Solution

There has never been a better time to be in the market for an oscilloscope. The Infiniium UXR-Series offers the most accurate analysis, runs faster with hardware acceleration powered by custom ASICs and FPGAs, and is fully upgradeable. Now you can truly do what has never been done before.

Get the most out of your oscilloscope investment by choosing options and software to speed your most common tasks. Use option numbers when ordering at time of purchase. Use model numbers to add to an existing scope.

Step 1: Choose Your UXR Oscilloscope Model

Choose your Infiniium UXR real-time oscilloscope model. There are 3 main models based on input connector size: 1mm, 1.85 mm, and 3.5 mm. Infiniium UXR-Series models offer bandwidths from 5 GHz to 110 GHz with various 1-channel, 2-channel, or 4-channel configurations available.







1 mm input model

1.85 mm input model

3.5 mm input model



Model 4-Channel	2-channel	Bandwidth (maximum)	Connector	Power required 4-channel	red 2-channel	Sample rate (maximum)
UXR1104A	UXR1102A	110 GHz				
UXR1004A	UXR1002A	100 GHz				
UXR0804A	UXR0802A	80 GHz				
UXR0704AP	UXR0702AP	70 GHz				
UXR0594AP	UXR0592AP	59 GHz	1 mm			
UXR0404AP	UXR0402AP	40 GHz				
UXR0254AP	UXR0252AP	25 GHz		200 to 240 V _{ac}	110 to 240 V _{ac}	256 GSa/s
N/A	UXR0051AP1	5 GHz		2615 VA(Max)	1350 VA (Max)	
UXR0704A	UXR0702A	70 GHz				
UXR0594A	UXR0592A	59 GHz	4.05			
UXR0504A	UXR0502A	50 GHz	1.85 mm			
UXR0404A	UXR0402A	40 GHz				
UXR0334A		33 GHz				
UXR0254A	-	25 GHz				
UXR0204A	-	20 GHz		100 to 240 V _{ac}		128 GSa/s
UXR0164A	N/A	16 GHz	3.5 mm	1350 VA (Max)	N/A	
UXR0134A	-	13 GHz		,		
UXR0104A	<u>-</u>	10 GHz				

The UXR0051AP includes two channels, but only one channel is licensed for use. The 2nd channel may be activated with the purchase of an upgrade license – N2166A Upgrade 1 channel UXR0051AP to 2 channel UXR0252AP.

All Infiniium UXR-Series models come standard with:

- 200 Mpts high-performance deep memory
- Removable 960 GB enterprise grade SSD 2.5" hard drive
- One Torque-Wrench 8 lb-in, 5/16 inch (Part Number: 8710-1765)
- Country-specific power cord
- Front cover
- Mini USB keyboard
- · USB optical mouse
- ESD mat with wrist and heel straps
- Node-locked perpetual core software license and 1-year updates and enhancements subscription



3.5 mm input models also include:

- Five connector savers, 3.5 mm Female-to-Female (5061-5311)
- Ten connector saver collars

Note: 10 GHz and 13 GHz UXR-Series 3.5 mm models additionally include two Precision BNC 50 Ω adaptors (N5442A)

1.85 mm input models also include:

- One per channel adapters, 1.85 mm Female-to-Female (85058-60114)
- One coaxial adapter, 2.92 mm to 2.40 mm Female-to-Female (11904B)
- One connector saver, 3.5 mm Female-to-Female (5061-5311)

1 mm input models also include:

- One per channel adapters, 1 mm Female Ruggedized to 1 mm Female (5067-1390)
- One per channel adapters, 1 mm Female Ruggedized to 1.85 mm Female (5067-1392)
- One adapter, 1 mm Female Ruggedized to 2.92 mm Female connector (5047-1393)
- One connector saver, 3.5 mm Female-to-Female (5061-5311)
- One Wrench, 2mm thick, dual-ended, fits 6mm and 7mm (54964-03801)
- One Wrench, 2mm thick, dual-ended, fits 8mm both ends (54964-03802)
- One Torque-Wrench, 4-in-lb 6mm-open end Gold-Handle (8710-2812)
- One Torque-Wrench, Special Double-end 14mm-open end 4 and 10-in-lb (8710-2819)

Step 2: Select Core Software Updates and Enhancements Subscription

The Infiniium UXR-Series core software subscription unlocks the full potential of your hardware, providing the measurement tools, analysis capabilities, and features required to meet the ever-increasing needs of your applications. The UXR includes a node-locked perpetual core software license and a minimum 1 year updates and enhancements subscription. You can extend your subscription to 3 or 5 years at time of purchase and then choose to renew later for a fee. Updates and enhancements for all add-on software (listed in Step 3) are covered by the core software subscription.

Core software	Description	
D91UXR01A	UXR core software for 128 GSa/s models 1 (default), 3, or 5 year updates and enhancements subscription	
D91UXR02A	UXR core software for 256 GSa/s models 1 (default), 3, or 5 year updates and enhancements subscription	



Step 3: Select Add-On Software

Infiniium UXR-Series core software offers a wide variety of advanced measurement, analysis, and decode software applications. Choose the add-on software that best fits your needs and unlocks the full potential of your hardware. Updates and enhancements for all add-on software are covered by the core software subscription.

Model number	Protocol software description		
D9110AUTP	Automotive protocol decode/trigger software (CAN, LIN, CAN-FD, FlexRay)		
D9120AUTP	High speed automotive protocol decode/trigger software (100/1000BASE-T1)		
D9110EKRP	10G/100GBASE-KR 64b/66b and link training decode/trigger software		
D9110EMBP	Embedded protocol decode/trigger software (USB2.0, 10/100 ETH, PCIe 2/1)		
D9110LSSP	Low speed protocol decode/trigger software (I2C, SPI, RS232, I2S, JTAG)		
D9110MCDP	MIPI CSI and DSI protocol decode/trigger software (C-PHY and D-PHY)		
D9110MILP	Military protocol decode/trigger software (ARINC 429, MIL-STD 1553, SpaceWire)		
D9110MPLP	Low speed MIPI protocol decode/trigger software (RFFE, I3C, SPMI)		
D9110MPMP	MIPI M-PHY protocol decode/trigger software (DigRF,LLI,CSI-3,UniPro,UFS,SSIC)		
D9110PCIP	Advanced PCIe protocol decode/trigger software (PCIe 5/4/3/2/1, SATA/SAS)		
D9110USBP	USB 3.x protocol decode/trigger software (USB 3.1 - 5 and 10 Gbps)		
D9120FECP	FEC (KP4) 400GE (100G Optical Lane) Decode/Trigger Software		
D9111BDLP	Basic Infiniium Protocol Trigger/Decode Bundle for Infiniium Oscilloscopes		
D9120BDLP	Complete Infiniium Protocol Trigger/Decode Bundle for Infiniium Oscilloscopes		

Model number	Measurement and analysis software description
D9110DMBA	De-embedding software (Precision Probe, InfiiniSim Basic)
D9120PAMA	Pulse amplitude modulation PAM-N analysis software
D9110POWA	Power integrity analysis software
D9110UDAA	User defined application software
D9120JITA	EZJIT complete – Jitter and vertical noise analysis software (recommended)
D9120SCNA	InfiniiScan event identification software (recommended)
D9120ASIA	Advanced signal integrity software (EQ, InfiiniSimAdv, Crosstalk) (recommended)
D9110WSAA	Wideband signal analysis acceleration package (require DDC option 601/602 for 160MHz RTSA)
D9120WSAA	Wideband signal analysis extended package (required DDC option 602 for 320MHz RTSA)

Step 4: Upgrade Your Oscilloscope Memory

Enable more capture depth with industry-leading deep memory. Get up to 2 Gpts per channel.

Option number	Protocol software description	
UXR0000-01G	1 Gpts per channel high performance memory	
UXR0000-02G	2 Gpts per channel high performance memory	



Step 5: Add Optional Frequency Extensions

For UXR-Series models that are not licensed to the maximum frequency their input connectors can support, available frequency extension options enable you to dynamically allocate up to 30 GHz wide bandwidth windows, for analysis of frequency ranges up to the max bandwidth of the hardware model, regardless of the oscilloscope's maximum licensed native bandwidth.

Option number	Protocol software description	
UXR0000-605	5 GHz configurable mmWave extension bandwidth window ¹	
UXR0000-610	10 GHz configurable mmWave extension bandwidth window ¹	
UXR0000-620	20 GHz configurable mmWave extension bandwidth window ¹	
UXR0000-630	30 GHz configurable mmWave extension bandwidth window ¹	
UXR0000-682 5 GHz configurable mmWave extension bandwidth window¹ – (maximum frequency range limited 82 GHz)		

Step 6: Add Optional Digital Down Conversion

Optionally add Digital Down Conversion (DDC) to accelerate and expand your mmWave analysis.

Option number	Protocol software description	
UXR0000-601	Hardware accelerated DDC for UXR-Series, 160 MHz analysis BW	
UXR0000-602	Hardware accelerated DDC for UXR-Series, 2.16 GHz analysis BW	

Step 7: or, Choose the mmWave Analysis Package (Bundle of Steps 4-6)

Choose the mmWave Analysis Package for additional savings. It is a turn-key mmWave analysis package that includes node locked perpetual licenses for UXR0000-02G, UXR0000-610, and UXR0000-602, for a lower total cost than purchasing each feature individually..

Option number	Protocol software description
UXR0000-MWA	mmWave wideband analysis acceleration and extension package for UXR-Series, includes: • UXR0000-02G 2 Gpts memory/ch
	 UXR0000-610 10 GHz Configurable mmWave extension bandwidth window¹
	UXR0000-602 hardware accelerated DDC 2 GHz bandwidth

^{1.} mmWave extension windows may be dynamically placed at independent center frequencies per channel within the maximum supported frequency of the UXR-Series' input connector: 3.5 mm models provide a usable frequency range from DC to 33 GHz, 1.85 mm models provide a usable frequency range from DC to 70 GHz, and 1 mm ruggedized models provide a usable frequency range from DC to 113 GHz (except -682).



Step 8: Add an Advanced or Accredited Calibration

Get a compliant or accredited calibration from the Keysight calibration test facility.

Option number	Protocol software description	
UXR0000-1A7	Calibration + Uncertainties + Guardbanding (ISO 17025 & ANSI Z540.3/Z540-1 Compliant1)	
UXR0000-AMG	Calibration + Uncertainties + Guardbanding (ISO 17025 & ANSI Z540.3/Z540-1 Accredited²)	

Step 9: Add an Optional Calibration Module

The Infiniium UXR-Series is the first real-time oscilloscope to offer an optional self-calibration module – capable of performing the same factory-quality vertical scale frame adjustments¹ you get when you return your oscilloscope to Keysight, but at your site and its environmental conditions. No longer do you have to lose productivity or time associated with returning your Infiniium UXR-Series oscilloscope back to the factory or a Keysight certified calibration center for calibration³, as long as you are equipped to perform the requisite performance verification steps to self-certify the calibration.

Model number	Protocol software description	
N2125A	Infiniium UXR Real-Time Oscilloscope Calibration Module, 1 mm	
N2126A	Infiniium UXR Real-Time Oscilloscope Calibration Module, 1.85 mm	
N2127A	Infiniium UXR Real-Time Oscilloscope Calibration Module, 3.5 mm	

- 1 Compliant: Denotes the Keysight calibration test facility has passed an internal audit with the same processes as an external audit. A compliant calibration will not receive an accreditation body symbol on the certificate of calibration.
- 2 Accredited: Denotes the Keysight calibration test facility has passed an external audit performed by a 3rd party that has been authorized by an accreditation body. An accredited calibration will receive an accreditation body symbol on the certification of calibration.
- 3 A full Keysight certified factory quality calibration consists of both vertical and horizontal frame calibration tests/adjustments, and subsequent performance testing and verification steps to ensure the oscilloscope is operating within its documented warranted specifications. The optional UXR-Series calibration modules perform only the factory-quality vertical frame adjustment calibration steps. Additional instrumentation and components are necessary to perform the required horizontal adjustments and vertical performance verification procedures to achieve an equivalent full self-verified and self-certified calibration. Please see the UXR-Series User's Guide for details of the necessary procedures and equipment. If an advanced or accredited calibration certificate is required (step 6 above), your UXR-Series oscilloscope must be returned to a qualified Keysight service center.



Step 10: Choose Your Infiniium Probes and Accessories

The UXR is compatible with the Keysight InfiniiMax probing system which includes probe amplifiers and tips ranging from 8 GHz to 30 GHz of low noise bandwidth. They are the most accurate and easiest to use probes in the market for measuring differential and single-ended signals across all high-speed digital designs. There are also optical-to-electrical converters, high-sensitivity photo-detector modules designed for direct optical-to-electrical conversion of telecom or datacom signals into the UXR. Please check the Infiniium Oscilloscopes Probes Accessories or visit Keysight Probe Resource Center.

Model number	Description	Note
MX0020A	10 GHz InfiniiMax Ultra probe amplifier	(RC architecture) Need adaptor N2852A for 1.85- and 1-mm models
MX0021A	13 GHz InfiniiMax Ultra probe amplifier	(RC architecture) Need adaptor N2852A for 1.85- and 1-mm models
MX0022A	16 GHz InfiniiMax Ultra probe amplifier	(RC architecture) Need adaptor N2852A for 1.85- and 1-mm models
MX0024A	20 GHz InfiniiMax Ultra probe amplifier	(RC architecture) Need adaptor N2852A for 1.85- and 1-mm models
MX0025A	25 GHz InfiniiMax Ultra probe amplifier	(RC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N2803A	30 GHz InfiniiMax III probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N2802A	25 GHz InfiniiMax III probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N2801A	20 GHz InfiniiMax III probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N7003A	20 GHz InfiniiMax III+ probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N7002A	16 GHz InfiniiMax III+ probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N7001A	13 GHz InfiniiMax III+ probe amplifier	(RCRC architecture) Need adaptor N2852A for 1.85- and 1-mm models
N7004A	33 GHz optical to electrical converter	Need adaptor N2852A for 1.85- and 1-mm models
N7005A	60 GHz optical to electrical converter	Auto Probe III Interface
MX0100A-001	25 GHz micro probe head (set of 5)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
MX0100A-002	25 GHz micro probe head (set of 25)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
MX0100A-003	25 GHz micro probe head (set of 50)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
MX0105A	20 GHz SMA probe head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
MX0106A	23 GHz solder-in probe head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2839A	21 GHz browser head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2837A	21 GHz browser head replace tip (set of 40)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N5425B	18 GHz ZIF probe head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N5426A	18 GHz ZIF tip (set of 10)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N5451A	4 GHz long-wired ZIF tip kit	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2884A	5 & 9.9 GHz fine wire tip	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
E2675B	6 GHz Differential browser head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
E2677B	12 GHz solder-in head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
E2678B	12 GHz socketed probe head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2880A	Coaxial attenuators	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2881A	DC blocking caps (set of 2)	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2851A	16 GHz QuickTip probe head	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
N2884A	Fine wire probing tips	(RC architecture) InfiniiMax I/II/RC/Ultra probe heads and tips
MX0104A	Performance verification and deskew fixture	



Step 11: Choose Your Infiniium Accessories

Get additional connectors, adapters, wrenches, and more to fully outfit your lab. Some of the below items come standard with certain UXR models. See page 5 for what's already included before adding additional accessories. For Multi-Scope application, please check the expansion kits.

Model number	Protocol software description	
N2164A	Infiniium UXR-Series Multi-Frame base cable kit for first two UXR-Series frames	
N2170A	Infiniium UXR-Series Multi-Frame Two-To-Three Expansion Kit	
N2165A	Infiniium UXR-Series add an additional UXR-Series frame to a multi-frame base kit	
N2156A	Rack mount kit for Infiniium UXR real-time oscilloscope	
N4865B	GPIB adapter sold separately by ICS Electronics, LAN (UXR) to GPIB	
82357B	USB/GPIB interface, USB (UXR) to GPIB	
N2158A	Transportation case for Infiniium UXR real-time oscilloscope	
N2131A-01T	Additional removable SSD for Infiniium UXR real-time oscilloscope – 1 TB	
Y1900B	Connector saver, 1 mm F ruggedized to 1 mm F (part number: 5067-1390)	
Y1900C	Connector saver, 1 mm F ruggedized to 1 mm M	
Y1901B	Connector saver, 1 mm F ruggedized to 1.85 mm F (part number: 5067-1392)	
Y1903B	Connector saver, 1 mm F ruggedized to 2.92 mm F (part number: 5067-1393)	
11904B	Connector saver, 2.4 mm F to 2.92 mm F	
11904D	Connector saver, 2.4 mm F to 2.92 mm M	
85058-60114	Adapter, 1.85 mm F-F	
54916-68717	Adapter, 3.5 mm F to 3.5 mm F - kit of 5	
5067-1390	Adapter, 1 mm ruggedized Female to 1 mm female	
5067-1392	Adapter, 1 mm ruggedized female to 1.85 mm F	
5067-1393	Adapter, 1 mm ruggedized female to 2.92 mm F	
54964-03801	Wrench, 2 mm thick, dual-ended, fits 6 mm and 7 mm	
54964-03802	Wrench, 2 mm thick, dual-ended, fits 8 mm both ends	
8710-1765	Wrench-torque, 8 lb-in, 5/16 Inch	
8710-2812	Wrench-torque, 4-in-lb 6 mm-open end gold-handle	
8710-2819	Wrench-torque, special double-end 14 mm-open end 4 and 10-in-lb	



Step 12: Upgrade Your UXR-Series Oscilloscope

The UXR-Series is fully upgradeable. You might never need to buy a new oscilloscope again. You can easily upgrade the channel count, bandwidth, memory, frequency extension windows, and memory.

Model number	"A" and "AP" model channel upgrades	
N2129BU-030	Channel upgrade – 40 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-031	Channel upgrade – 50 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-032	Channel upgrade – 59 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-033	Channel upgrade – 70 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-034	Channel upgrade – 80 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-035	Channel upgrade – 100 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-036	Channel upgrade – 110 GHz Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-037	Channel upgrade – 25 GHz, 1mm Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-038	Channel upgrade – 40 GHz, 1mm Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-039	Channel upgrade – 59 GHz, 1mm Infiniium UXR real-time oscilloscope 2 to 4Ch	
N2129BU-040	Channel upgrade – 70 GHz, 1mm Infiniium UXR real-time oscilloscope 2 to 4Ch	

The channel count upgrade required return-to-Keysight Service Center. Service Center installation, calibration, and shipment costs are in addition to upgrade product price.

Model number	"A" model bandwidth upgrades
N2129BU-020	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 10 GHz to 13 GHz
N2129BU-003	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 13 GHz to 16 GHz
N2129BU-004	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 16 GHz to 20 GHz
N2129BU-005	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 20 GHz to 25 GHz
N2129BU-006	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 25 GHz to 33 GHz
N2129BU-007	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 33 GHz to 40 GHz Return-to-Keysight Service Center for upgrade
N2129BU-008	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 40 GHz to 50 GHz
N2129BU-009	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 50 GHz to 59 GHz
N2129BU-010	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 59 GHz to 70 GHz
N2129BU-011	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 70 GHz to 80 GHz Return-to-Keysight Service Center for upgrade
N2129BU-012	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 80 GHz to 100 GHz
N2129BU-013	Bandwidth upgrade – 2 Ch Infiniium UXR real-time oscilloscope – 100 GHz to 110 GHz
N2129BU-014	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 40 GHz to 50 GHz
N2129BU-015	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 50 GHz to 59 GHz
N2129BU-016	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 59 GHz to 70 GHz
N2129BU-017	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 70 GHz to 80 GHz Return-to-Keysight Service Center for upgrade
N2129BU-018	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 80 GHz to 100 GHz
N2129BU-019	Bandwidth upgrade – 4 Ch Infiniium UXR real-time oscilloscope – 100 GHz to 110 GHz

If multiple upgrade steps are needed, order all the corresponding upgrade products required to get from the current bandwidth to desired bandwidth.



Model number	"AP" model channel upgrades (License Only)	
N2157A-011	Bandwidth upgrade 2 Ch Infiniium UXR real-time oscilloscope 25 GHz AP model to 40 GHz AP model (License Only)	
N2157A-012	Bandwidth upgrade 4 Ch Infiniium UXR real-time oscilloscope 25 GHz AP model to 40 GHz AP model (License Only)	
N2157A-013	Bandwidth upgrade 2 Ch Infiniium UXR real-time oscilloscope 40 GHz AP model to 59 GHz AP model (License Only)	
N2157A-014	Bandwidth upgrade 4 Ch Infiniium UXR real-time oscilloscope 40 GHz AP model to 59 GHz AP model (License Only)	
N2157A-015	Bandwidth upgrade 2 Ch Infiniium UXR real-time oscilloscope 59 GHz AP model to 70 GHz AP mode (License Only)I	
N2157A-016	Bandwidth upgrade 4 Ch Infiniium UXR real-time oscilloscope 59 GHz AP model to 70 GHz AP model (License Only)	
N2157A-017	Bandwidth upgrade 2 Ch Infiniium UXR real-time oscilloscope 70 GHz AP model to 80 GHz A model (License Only)	
N2157A-018	Bandwidth upgrade 4 Ch Infiniium UXR real-time oscilloscope 70 GHz AP model to 80 GHz A model (License Only)	
N2166A	Upgrade 1 Ch Infiniium UXR real-time oscilloscope 5 GHz AP model to 2Ch 25 GHz AP model (License Only)	
Model number	mmWave extension bandwidth window upgrades (License Only)	
N2163A-005	5 GHz configurable mmWave extension bandwidth window upgrade	
N2163A-010	5 GHz to 10 GHz configurable mmWave extension bandwidth window upgrade	
N2163A-020	Upgrade 10 GHz to 20 GHz configurable mmWave extension bandwidth window	
N2163A-030	Upgrade 20 GHz to 30 GHz configurable mmWave extension bandwidth window	
N2163A-082	5 GHz mmWave configurable bandwidth window – DC to 82 GHz	
N2163A-601	Hardware accelerated DDC for UXR-Series, 160 MHz BW	
N2163A-602	Upgrade hardware accelerated DDC for UXR-Series BW from 160 MHz to 2 GHz	

Model number	Memory upgrades (License Only)	
N2130A-01G	Memory upgrade – 200Mpts/Ch to 1Gpts/Ch, fixed perpetual license	
N2130A-02G	Memory upgrade – 1Gpts/Ch to 2Gpts/Ch, fixed perpetual license	



Step 13: Choose Your Infinitum UXR-Series Support, Services, and Training

Get more from your test investment with Keysight Services. Keysight's warranty and calibration services are the convenient way to ensure the ongoing accuracy and availability of all your test assets.

Model number	Description	
R-51B-001-3C	Warranty Assurance Plan – Return to Keysight - 3 years	
R-51B-001-5C	Warranty Assurance Plan – Return to Keysight - 5 years	
R-50C-001-3	Calibration Assurance Plan – Return to Keysight - 3 years	
R-50C-001-5	Calibration Assurance Plan – Return to Keysight - 5 years	
PS-S10	Remote scheduled productivity assistance. Select 1 to 999 hours.	
PS-S20	On site startup assistance, daily	
PS-T10- SCOPES	On site 0.5 day – H7240B-100 – Digitizing Oscilloscope Fundamentals class. Max 8 students.	
PS-X10	Custom services	

Step 14: Choose Your Infiniium Offline Software

Keysight offers a powerful offline analysis tool. The Infiniium offlice software let you view, analyze, share, and document scope measurements anywhere your PC goes.

Model number	Measurement and analysis offline software
D9010ASIO	Infiniium Offline – Adv signal integrity software (InfiniiSim Adv/EQ/Crosstalk)
D9010BSEO	Infiniium Offline – Base software
D9010HSPO	Infiniium Offline – High speed protocol software bundle
D9010JITO	Infiniium Offline – EZJIT complete software
D9010LSPO	Infiniium Offline – Low speed protocol software bundle



Step 15: Choose Your Infiniium Compliance Software

Keysight offers a wide variety of compliance software applications for the Infiniium UXR-Series. Choose your license term, license type, and KeysightCare software support subscription that best fits your needs and budget.

All Infiniium UXR-Series models come standard with:

- Serial data analysis (SDA) software to provide flexible clock recovery including 1st, 2nd, and 3rdorder PLL and constant algorithms. With a stable clock, you can look at real-time eyes of transition
 and non-transition bits. UXR-Series oscilloscopes with SDA software also provide a new unique view
 of bits preceding an eye.
- User defined function
- Fast Fourier Transform (FFT) for frequency domain (spectrum) analysis. Use the FFT to compute both magnitude and phase and take advantage of several useful features to assist in spectral analysis. The FFT can control span and resolution bandwidth.
- 40 MHz of RTSA and DDC analysis bandwidth, with a frequency range up to the oscilloscope bandwidth.

Model number	Measurement and analysis offline software	
D9010SFPC	SFP+ and QSFP+ compliance test application (12 GHz+)	
D9010XAUC	XAUI compliance test with 10GBASE-CX4, CPRI, OBSAI, and serial RapidIO support (13 GHz+)	
D9010BJAC	Ethernet 40GBASE-CR4 and 100GBASE-CR10 compliance test application (25 GHz+)	
D9010ETHC	10M/100M/1GBASE-T and energy efficient ethernet (1 GHz +)	
D9010EBZC	Ethernet 10GBASE-T, NBASE-T and MGBASE-T compliance test application (4 GHz +)	
D9010EAPC	Ethernet 10GBASE-KR and 40GBASE-KR4 compliance test application (25 GHz+)	
D90103BQC	Ethernet 25GBASE-T, 10GBASE-T, NBASE-T and MGBASE-T (6 GHz +)	
D9010BJBC	Ethernet 100GBASE-KR4 compliance test application (50 GHz+)	
D9010BJCC	Ethernet 100GBASE-CR4 compliance test application (50 GHz+)	
D9010CAUC	Ethernet CAUI-4 compliance test application (50 GHz+)	



Model number Measurement and analysis offline software D9010EBSC IEEE802.3bs/cd compliance test application (50 GHz+) D9010CEIC OIF-CEI 4.0 compliance test application (70 GHz+) D9050CEIC Electrical TX test SW for OIF-CEI-112G VSR/MR/LR (70 GHz+) D90103CKC IEEE 802.3ck compliance test application (50 GHz+) D9010ONFC ONFI (open NAND flash interface) compliance test application (4 GHz +) D9020DDRC DDR2 and LPDDR2 compliance test application (4 GHz +) D9030DDRC DDR3 and LPDDR3 compliance test application (8 GHz +) D9040DDRC DDR4 and LPDDR4 compliance test application (13 GHz +) D9050DDRC DDR5 TX compliance test application (16 GHz +) D9010CPHC MIPI C-PHY compliance test application (16 GHz +) D9020DPHC MIPI D-PHY compliance test application (13 GHz +) D9040MPHC MIPI M-PHY compliance test application up to Gear 4 (25 GHz +) MIPI M-PHY compliance test application up to Gear 5 (50 GHz +) D9050MPHC D9040PCIC PCIe 1.0 to 4.0 transmitter electrical performance validation and compliance (25 GHz +) D9050PCIC PCI Express 5.0 transmitter electrical performance validation and compliance (50 GHz +) **D9010USBC** USB 2.0 transmitter compliance test application (2.5 GHz+) D9020USBC USB 3.2: 5 Gbps and 10 Gbps transmitter compliance (16 GHz+) D9040USBC USB 4 transmitter compliance test software (33 GHz +) D9030TBTC Thunderbolt 3 transmitter compliance (25 GHz +) D9030SATC SATA 6Gb/s compliance test application (13 GHz +) D9040SASC SAS-4 (serial attached SCSI-4) compliance test application (33 GHz +) D9040DPPC DisplayPort 1.4 compliance and validation (16 GHz+) D9042DPPC DisplayPort UHBR Tx compliance test software (25 GHz +) D9040EDPV eDP 1.4 (embedded DisplayPort) electrical performance and characterization (16 GHz+) D9021HDMC HDMI 1.4 and HDMI 2.1 electrical performance, validation and compliance (20 GHz +) D9010AGGC Compliance test software measurement server license AE6920T Automotive Ethernet Tx Compliance Software 10M to 10Gbps (13 GHz +)



Compliance Test Software Subscription Suites

Keysight's new Compliance Test Software Suites provide a new way of ownership and management of Compliance Test Software for organizations using a subscription-based approach. Each suite will enable generational coverage across the technology.

Model number	Technology generation and variants coverage
SW00PCIE PCI Express Validation Suite	PCI Express Gen 4 TX Test (D9040PCIC) PCI Express Gen 5 TX Test (D9050PCIC)
SW02PCIE PCI Express Full Tx Test Suite	PCI Express Gen 4 TX Test (D9040PCIC) PCI Express Gen 5 TX Test (D9050PCIC) Advanced PCI Express Protocol Decode
SW00USBH USB High Speed Validation Suite	USB 3.2 TX Test (D9020USBC) USB 4.0 TX Test (D9040USBC)
SW00USBH USB High Speed Full Tx Test Suite	USB 3.2 TX Test (D9020USBC) USB 4.0 TX Test (D9040USBC) USB 4.0, 3.2, 2.0 Protocol Decode
SW00LDDR LPDDR Validation License	LPDDR5 TX Validation (D9050LDDC)
SW00DDRV DDR Validation Suite	DDR3 TX Validation (D9030DDRC) DDR4 TX Validation (D9040DDRC) DDR5 TX Validation (D9050DDRC)
SW00DSPP DisplayPort Validation Suite	Display Port TX Application (D9040DPPC) Display Port UHBR (2.0) TX Application (D9042DPPC)
SW02DSPP DisplayPort Full Validation Suite	DisplayPort TX Application (D9040DPPC) DisplayPort UHBR (2.0) TX Application (D9042DPPC) DisplayPort eDP TX Test (D9040EDPV)
SW00MIPI MIPI Validation Suite	C-PHY TX Validation (D9010CPHC) D-PHY TX Validation (D9020DPHC) M-PHY TX Validation (D9040MPHC)
SW02MIPI MIPI Full Tx Test Suite	C-PHY TX Validation (D9010CPHC) D-PHY TX Validation (D9020DPHC) M-PHY TX Validation (D9040MPHC) C-PHY and D-PHY Protocol Validation (D9010MCDP) M-PHY Protocol Validation (D9010MPMP) LowSpeed Protocol Validation (D9010MPLP)
SW00IECK IEEE 802.3 CK TX License	IEEE 802.3 CK Validation (D90103CKC)
SW00OIFC OIF CEI TX License	OIF CEI Validation (D9050CEIC)



Compliance Software Licensing and KeysightCare Software Support Subscriptions

Each of the Infiniium measurement, analysis, decode, triggering, and compliance software options are offered as various software licensing options. Choose your license term, type, and support contract for each software product.

Select your software license:

- 1. Choose your software product (for example: D9050PCIC).
- 2. Choose your license term: perpetual or subscription.
 - a. Perpetual Perpetual licenses can be used indefinitely.
 - b. **Subscription** Subscription licenses can be only be used through the term of the license (6, 12, 24, or 36 months license options available).
- 3. Choose your license type: node-locked, transportable, USB portable, or floating.
 - a. Node-locked License can be used on one specified instrument/computer.
 - b. **Transportable** License can be used on one instrument/computer at a time but may be transferred to another using Keysight Software Manager (Internet connection required).
 - c. USB Portable License can be used on one instrument/computer at a time but may be transferred to another using a certified USB dongle (available for additional purchase with Keysight part number E8900-D10).
 - d. **Floating (single site)** Networked instruments/computers can access a license from a server one at a time. Multiple licenses can be purchased for concurrent usage.
- 4. Choose your support subscription duration.
 - a. Perpetual licenses are sold with a **12 (default)**, **24**, **36**, **or 60-month software support subscription**. Support subscriptions can be renewed for a fee after that.
 - b. Subscription licenses include a **software support subscription through the term of the license**.



More Information

Thank you for choosing a Keysight UXR-Series Oscilloscope. The Keysight Infiniium UXR-Series oscilloscopes set a new standard for real-time oscilloscope accuracy, with models ranging from 5 to 110 GHz. Extreme signal integrity, 10-bits of vertical resolution and ultra-low noise floor specifications allow for the truest representation of signals. Invest with confidence today, knowing you have the ability to meet the needs of technology advancements tomorrow. For more information on the UXR, check out the following:

- UXR Datasheet
- UXR Technical Overview
- Infiniium Oscilloscope Probes and Accessories

