

SAMSUNG

Neo QLED QN80H 4K Samsung Vision AI Smart TV (2026)

The answer to your true immersion



50", 55", 65", 75"

Top Features

Ask your companion. Samsung Vision AI is here.

Getting help from Samsung Vision AI Companion has never been easier. Responses come instantly with related video/image options to choose from, making your discovery richer and more personalised than any other AI assistant on your TV.¹

Our advanced Mini LED technology

Experience ultra-fine contrast with Quantum Mini LED, precisely controlled by Quantum Matrix Technology Core. Quantum Mini LED in concentrated zones enables you to enjoy ultra-fine contrast and extra brightness in each scene.

Get smooth motion for games up 144Hz

Level up your gaming experience with exceptional motion enhancements up to 144Hz VRR. Providing crisp visuals at high speeds, unlock peak performance in every round. HDMI 2.1 compatibility provides access to ultra-high bandwidth for compatible devices, helping you keep ahead of the competition.

Enjoy the match your way with AI-enhanced viewing

Turn on AI-driven picture and sound tuning made for soccer. Enhance player detail with clear commentary to help you follow every pass and every moment with stadium-like intensity. With smart scene-by-scene optimisation, your TV automatically helps deliver a sharp, immersive match-day experience, so you can stay locked into the game from kick-off to final whistle.³

¹ Information based on Samsung TV Plus channels only. Provides AI created content, with accuracy not guaranteed. Not all accents, dialects, and expressions are recognised. Availability of features may vary. Available on 2025 Q7F and above, and 2026 M80H and above TVs.

² Requires compatible gaming PC supporting 4K resolution and 144Hz Variable Refresh Rate. Picture quality will vary depending on quality and resolution of source content.

³ AI technology designed to detect and optimise soccer content only. Availability and performance will vary according to several factors including source content and application in use

Product	Product Category	50"	55"	65"	75"
		NeoQLED	NeoQLED	NeoQLED	NeoQLED
	Model Number	QA50QN80HAWXXY	QA55QN80HAWXXY	QA65QN80HAWXXY	QA75QN80HAWXXY
	Screen Size	50"	55"	65"	75"
Display	Resolution	3840 x 2160	3840 x 2160	3840 x 2160	3840 x 2160
	Refresh Rate	50 Hz	144 Hz VRR (100 Hz Native)	144 Hz VRR (100 Hz Native)	144 Hz VRR (100 Hz Native)
	DLG	N/A	240 Hz	240 Hz	240 Hz
	Anti Reflection	N/A	N/A	N/A	N/A
	Picture Engine	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor
Video	Micro Dimming	Supreme Mini LED Dimming	Supreme Mini LED Dimming	Supreme Mini LED Dimming	Supreme Mini LED Dimming
	Contrast Enhancer	Real Depth Enhancer	Real Depth Enhancer	Real Depth Enhancer	Real Depth Enhancer
	Motion Technology	Motion Xcelerator	Motion Xcelerator 144 Hz	Motion Xcelerator 144 Hz	Motion Xcelerator 144 Hz
	Smart Calibration	Basic	Basic	Basic	Basic
	AI Picture	AI Optimised/AI Customisation	AI Optimised/AI Customisation	AI Optimised/AI Customisation	AI Optimised/AI Customisation
	Picture Upscale	4K AI Upscaling	4K AI Upscaling	4K AI Upscaling	4K AI Upscaling
	AI Motion Enhancer	N/A	N/A	N/A	N/A
	Supersize Picture Enhancer	N/A	N/A	N/A	N/A
	HDR Brightness Optimiser	Yes	Yes	Yes	Yes
	Colour Booster	Colour Booster Pro	Colour Booster Pro	Colour Booster Pro	Colour Booster Pro
	Viewing Angle	N/A	Wide Viewing Angle	Wide Viewing Angle	Wide Viewing Angle
	HDR (High Dynamic Range)	NQ HDR+	NQ HDR+	NQ HDR+	NQ HDR+
	HDR 10+	Yes (ADAPTIVE / ADVANCED)	Yes (ADAPTIVE / GAMING / ADVANCED)	Yes (ADAPTIVE / GAMING / ADVANCED)	Yes (ADAPTIVE / GAMING / ADVANCED)
	Contrast	Quantum Mini LED	Quantum Mini LED	Quantum Mini LED	Quantum Mini LED
	Filmmaker Mode	Yes	Yes	Yes	Yes
EyeComfort Mode	Yes	Yes	Yes	Yes	
Auto HDR Remastering	Auto HDR Remastering	Auto HDR Remastering	Auto HDR Remastering	Auto HDR Remastering	
Audio	Dolby Atmos	Yes	Yes	Yes	Yes
	Object Tracking Sound	OTS Lite	OTS Lite	OTS Lite	OTS Lite
	Q-Symphony	Yes	Yes	Yes	Yes
	Sound Output (RMS)	30WW	30WW	30WW	30WW
	Speaker Type	2CH	2CH	2CH	2CH
	Active Voice Amplifier	Active Voice Amplifier Pro	Active Voice Amplifier Pro	Active Voice Amplifier Pro	Active Voice Amplifier Pro
	Adaptive Sound	Adaptive Sound Pro	Adaptive Sound Pro	Adaptive Sound Pro	Adaptive Sound Pro
	360 Audio	Yes	Yes	Yes	Yes

		50"	55"	65"	75"
Smart Service	Far-Field Voice Interaction	Yes	Yes	Yes	Yes
	Built-in Voice Assistant	Alexa	Alexa	Alexa	Alexa
	Works with AI Speaker	Alexa, Google Assistant	Alexa, Google Assistant	Alexa, Google Assistant	Alexa, Google Assistant
	Operating System	Tizen™ Smart TV	Tizen™ Smart TV	Tizen™ Smart TV	Tizen™ Smart TV
	Bixby	Yes	Yes	Yes	Yes
	Samsung TV Plus	Yes	Yes	Yes	Yes
	Web Browser	Yes	Yes	Yes	Yes
	SmartThings Hub / Matter Hub / IoT-Sensor Functionality / Quick Remote	Yes	Yes	Yes	Yes
	Universal Guide	Yes	Yes	Yes	Yes
Smart Feature	Multi Device Experience	Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On	Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On	Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On	Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On
	Multi-View	Up to 2 videos			
	Apple AirPlay 2	Yes	Yes	Yes	Yes
	Daily+	Yes	Yes	Yes	Yes
	Now brief	Voice / User Detection			
	Storage Share	Yes	Yes	Yes	Yes
	Vision AI Companion	Yes (AU, VN, TH, MM, KH, LA, PH, SG)	Yes (AU, VN, TH, MM, KH, LA, PH, SG)	Yes (AU, VN, TH, MM, KH, LA, PH, SG)	Yes (AU, VN, TH, MM, KH, LA, PH, SG)
	Generative Wallpaper	Yes	Yes	Yes	Yes
	Karaoke Mic	Yes	Yes	Yes	Yes
	Google Cast	Yes	Yes	Yes	Yes
Soccer / Football Mode	AI Soccer / Football Mode	AI Soccer / Football Mode	AI Soccer / Football Mode	AI Soccer / Football Mode	
Game Feature	Auto Game Mode (ALLM)	Yes	Yes	Yes	Yes
	Game Motion Plus	Yes	Yes	Yes	Yes
	VRR	Yes	Yes	Yes	Yes
	Dynamic Black EQ	Yes	Yes	Yes	Yes
	Surround Sound	Yes	Yes	Yes	Yes
	Ultra Wide Game View	Yes	Yes	Yes	Yes
	Game Bar	Yes	Yes	Yes	Yes
	MiniMap Zoom	Yes	Yes	Yes	Yes
	Hue Sync	Yes	Yes	Yes	Yes
	FreeSync	N/A	FreeSync Premium Pro	FreeSync Premium Pro	FreeSync Premium Pro
	G-SYNC	N/A	N/A	N/A	N/A
	HGiG	Yes	Yes	Yes	Yes
	Gaming Hub	Yes (KR, US, CA, BR, GB, FR, DE, IT, ES, MX, AU)	Yes (KR, US, CA, BR, GB, FR, DE, IT, ES, MX, AU)	Yes (KR, US, CA, BR, GB, FR, DE, IT, ES, MX, AU)	Yes (KR, US, CA, BR, GB, FR, DE, IT, ES, MX, AU)
AI Auto Game Mode	Yes	Yes	Yes	Yes	

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Tuner/Broadcasting	Digital Broadcasting	DVB-T(T2 Ready)	DVB-T(T2 Ready)	DVB-T(T2 Ready)	DVB-T(T2 Ready)
	CI (Common Interface)	N/A	N/A	N/A	N/A
	Analog Tuner	Yes	Yes	Yes	Yes
Connectivity	HDMI	4	4	4	4
	HDMI Maximum Input Rate	4K 60 Hz (for HDMI 1/2/3/4)	4K 144 Hz (for HDMI 1/2/3/4)	4K 144 Hz (for HDMI 1/2/3/4)	4K 144 Hz (for HDMI 1/2/3/4)
	USB	2 x USB-A	2 x USB-A	2 x USB-A	2 x USB-A
	POGO (SlimFit Cam Only)	N/A	N/A	N/A	N/A
	Ethernet (LAN)	1	1	1	1
	Audio Out (Mini Jack)	N/A	N/A	N/A	N/A
	Digital Audio Out (Optical)	1	1	1	1
	RF In (Terrestrial / Cable input / Satellite input)	1/1(Common Use for Terrestrial)/0			
	Ex-Link (RS-232C)	N/A	N/A	N/A	N/A
	HDMI Audio Return Channel	eARC	eARC	eARC	eARC
	One Connect Box	N/A	N/A	N/A	N/A
	Wi-Fi	Yes (Wi-Fi 6E)	Yes (Wi-Fi 6E)	Yes (Wi-Fi 6E)	Yes (Wi-Fi 6E)
	Bluetooth	Yes (5.3)	Yes (5.3)	Yes (5.3)	Yes (5.3)
	Anynet+ (HDMI-CEC)	Yes	Yes	Yes	Yes
Design	Design	Monolith Edge	Monolith Edge	Monolith Edge	Monolith Edge
	Bezel Type	3 Bezel-less	3 Bezel-less	3 Bezel-less	3 Bezel-less
	Front Colour	TITAN BLACK	TITAN BLACK	TITAN BLACK	TITAN BLACK
	Stand Type	ROUND FEET	ROUND FEET	ROUND FEET	ROUND FEET
	Stand Colour	BLACK	BLACK	BLACK	BLACK
Additional Feature	Auto Rotation	N/A	N/A	N/A	N/A
	Art Mode	N/A	N/A	N/A	N/A
	Art Store	Yes	Yes	Yes	Yes
	Motion Detection	N/A	N/A	N/A	N/A
	Knox Vault	N/A	N/A	N/A	N/A
	Embedded POP	Yes	Yes	Yes	Yes
	EPG	Yes	Yes	Yes	Yes
	Extended PVR	Yes	Yes	Yes	Yes
	IP Control	Yes	Yes	Yes	Yes
	OSD Language	Local Languages	Local Languages	Local Languages	Local Languages

		50"	55"	65"	75"
Accessibility	Auto Description	Yes	Yes	Yes	Yes
	High Contrast	Yes	Yes	Yes	Yes
	Zoom Menu and Text	Yes	Yes	Yes	Yes
	SeeColours	Yes	Yes	Yes	Yes
	Colours Inversion	Yes	Yes	Yes	Yes
	Grayscale	Yes	Yes	Yes	Yes
	Auto Picture Off	Yes	Yes	Yes	Yes
	Magnification	Yes	Yes	Yes	Yes
	Relumino	Yes	Yes	Yes	Yes
	Audio Subtitles	Yes	Yes	Yes	Yes
	Audio Phone Number	Yes	Yes	Yes	Yes
	Closed Caption	N/A	N/A	N/A	N/A
	Separate Closed Caption	N/A	N/A	N/A	N/A
	Slow Button Repeat	Yes	Yes	Yes	Yes
	Accessibility Shortcuts Edit	Yes	Yes	Yes	Yes
	Learn TV Remote	Yes	Yes	Yes	Yes
	Learn Menu Screen	Yes	Yes	Yes	Yes
Accessibility Shortcuts Edit	Yes	Yes	Yes	Yes	
Auto Menu Sort	Yes	Yes	Yes	Yes	
Sensory-friendly Mode	N/A	N/A	N/A	N/A	
Voice Guide	Chinese (China),English (UK),French (France),German (Germany),Hindi (India),Indonesian (Indonesia),Italian (Italy),Korean (Korea),Malay (Malaysia),Portuguese (Portugal),Russian (Russia),Spanish (Spain),Thai (Thailand),Vietnamese (Vietnam)	Chinese (China),English (Australia),French (France),German (Germany),Italian (Italy),Korean (Korea),Malay (Malaysia),Spanish (Spain)	Chinese (China),English (Australia),French (France),German (Germany),Italian (Italy),Korean (Korea),Malay (Malaysia),Spanish (Spain)	Chinese (China),English (Australia),French (France),German (Germany),Italian (Italy),Korean (Korea),Malay (Malaysia),Spanish (Spain)	
Power & Eco Solution	Power Supply	AC220-240V~ 50/60Hz	AC220-240V~ 50/60Hz	AC220-240V~ 50/60Hz	AC220-240V~ 50/60Hz
	Power Consumption (Max)	190W	200W	250W	310W
	Power Consumption (Stand-by)	0.5W	0.5W	0.5W	0.5W
	Power Consumption (Energy Saving Mode)	N/A	N/A	N/A	N/A
	Power Consumption (Typical)	99.0W	102.0W	153.0W	189.0W
	Yearly Power Consumption (EU standard)	364kWh	375kWh	562kWh	693kWh
	Auto Power Saving	Yes	Yes	Yes	Yes
	Auto Power Off	Yes	Yes	Yes	Yes
	Eco Sensor	Yes	Yes	Yes	Yes
	Energy Efficiency Class	3.5	4.5	4	4

		50"	55"	65"	75"
Dimension	Package Size (WxHxD)	1228 x 743 x 127mm	1352 x 808 x 127mm	1578 x 933 x 142mm	1830 x 1075 x 164mm
	Set Size with Stand (WxHxD)	1110.2 x 680 x 218mm	1224 x 744 x 218mm	1442.9 x 867.1 x 256.8mm	1666.6 x 993.8 x 319.8mm
	Set Size without Stand (WxHxD)	1110.2 x 643.9 x 51.7mm	1224 x 708 x 52mm	1442.9 x 831.2 x 52mm	1666.6 x 957.8 x 52.3mm
	Stand (Basic) (WxD)	839.2 x 218mm	1034.6 x 218mm	1209.5 x 256.8mm	1403.2 x 319.8mm
	Stand (Minimum) (WxD)	250 x 218mm	250 x 218mm	300.3 x 256.8mm	340.6 x 319.8mm
	VESA Spec	200 x 200mm	300 x 200mm	400 x 300mm	400 x 300mm
Weight	Package Weight	15.0kg	18.1kg	23.6kg	31.8kg
	Set Weight with Stand	11.4kg	13.5kg	17.6kg	23.5kg
	Set Weight without Stand	11.1kg	13.2kg	17.2kg	23kg
Accessory	Remote Controller Model	TM2280A	TM2280A	TM2280A	TM2280A
	Slim Fit Wall-mount Support	Yes	Yes	Yes	Yes
	Studio Stand Support	Yes	Yes	Yes	Yes
	Customizable Frame Support	N/A	N/A	N/A	N/A
	Full Motion Slim Wall Mount Support (Y22)	Yes	Yes	Yes	Yes
	SlimFit Cam Support	Yes	Yes	Yes	Yes
	Zigbee / Thread Module	Dongle Support	Dongle Support	Dongle Support	Dongle Support
	User Manual	Yes	Yes	Yes	Yes
	Power Cable	Yes	Yes	Yes	Yes
	One Connect Box Holder	N/A	N/A	N/A	N/A
Software Support	Security Update Period (At least 5 years)	31 Dec 2031	31 Dec 2031	31 Dec 2031	31 Dec 2031