

# SAMSUNG

## OLED S90H 4K Samsung Vision AI Smart TV (2026)

The answer to ultimate immersion



42", 48", 55", 65", 77", 83"

### 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.<sup>1</sup>

**See real blacks and colour, enhanced by Glare Free**

The S90H delivers deep blacks with Real Black\* performance and lifelike colour with PANTONE Validated® certification\*, for a more authentic, immersive picture. With certified Glare Free\* technology, you can get stunning contrast and clarity with fewer reflections, so virtually every scene looks rich, vibrant, and true to life, even in bright rooms.<sup>2</sup>

**Ultra-smooth gaming, built for gamers**

Unlock the ultimate gaming experience with Motion Xcelerator 165Hz, NVIDIA G-SYNC, and AMD FreeSync Premium Pro. Enjoy ultra-smooth, tear-free gameplay with low latency and real-time responsiveness, so every move feels fast, sharp, and more immersive.<sup>3</sup>

**Feel the stadium at home with AI-enhanced viewing**

AI Soccer Mode Pro automatically detects live matches and helps optimise picture and sound for soccer. Designed to sharpen player detail, and produce a balanced crowd atmosphere with clear commentary, so every moment feels more immersive and match-ready, with minimal distractions.<sup>4</sup>

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 TVs.

2 VDE Testing and Certification Institute evaluated the S90H for Real Black performance (Black level  $\leq 0.005\text{cd/m}^2$ ; Greyscale discrimination (@500 Lx ambient; Gloss Unit  $\leq 15\text{GU}$ ). Test Report 332597-TL6-1, valid until 04/03/2027. The S90H meets the requirements of PANTONE® Validated. Certificate dated 20/02/2026. Picture quality may vary depending on quality and resolution of source content and viewing conditions. The S90H has been independently verified as Glare Free (Reflection Glare UGR <10, Discomfort Glare UGR <22, Disability Glare UGR <34 by UL LLC. (UL Solutions). Certificate Number: V166045 - Exp. 31/12/2026

3 AMD FreeSync™ requires a compatible gaming PC with a FreeSync-compatible AMD graphics card or APU. NVIDIA® G-SYNC® Compatible requires a G-SYNC compatible NVIDIA graphics card or a FreeSync-compatible AMD graphics card or APU and requires enabling VRR settings in both the TV and GPU driver settings. Viewing experience may vary according to types of content and graphics processing unit, as well as network connection speeds and ping levels when gaming on the cloud.

4 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



		42"	48"	55"	65"	77"	83"
Smart Service	Far-Field Voice Interaction	Yes	Yes	Yes	Yes	Yes	Yes
	Built-in Voice Assistant	Alexa	Alexa	Alexa	Alexa	Alexa	Alexa
	Works with AI Speaker	Alexa, Google Assistant					
	Operating System	Tizen™ Smart TV					
	Bixby	Yes	Yes	Yes	Yes	Yes	Yes
	Samsung TV Plus	Yes	Yes	Yes	Yes	Yes	Yes
	Web Browser	Yes	Yes	Yes	Yes	Yes	Yes
	SmartThings Hub / Matter Hub / IoT-Sensor Functionality / Quick Remote Universal Guide	Yes	Yes	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	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	Yes	Yes
	Daily+	Yes	Yes	Yes	Yes	Yes	Yes
	Now brief	Voice / User Detection					
	Storage Share	Yes	Yes	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)	Yes (AU, VN, TH, MM, KH, LA, PH, SG)	Yes (AU, VN, TH, MM, KH, LA, PH, SG)
	Generative Wallpaper	N/A	N/A	N/A	N/A	N/A	Yes
	Karaoke Mic	Yes	Yes	Yes	Yes	Yes	Yes
	Google Cast	Yes	Yes	Yes	Yes	Yes	Yes
	Soccer / Football Mode	AI Soccer / Football Mode Pro	AI Soccer / Football Mode				
Game Feature	Auto Game Mode (ALLM)	Yes	Yes	Yes	Yes	Yes	Yes
	Game Motion Plus	Yes	Yes	Yes	Yes	Yes	Yes
	VRR	Yes	Yes	Yes	Yes	Yes	Yes
	Dynamic Black EQ	Yes	Yes	Yes	Yes	Yes	Yes
	Surround Sound	Yes	Yes	Yes	Yes	Yes	Yes
	Ultra Wide Game View	Yes	Yes	Yes	Yes	Yes	Yes
	Game Bar	Yes	Yes	Yes	Yes	Yes	Yes
	MiniMap Zoom	Yes	Yes	Yes	Yes	Yes	Yes
	Hue Sync	Yes	Yes	Yes	Yes	Yes	Yes
	FreeSync	FreeSync Premium	FreeSync Premium Pro				
	G-SYNC	Yes	Yes	Yes	Yes	Yes	N/A
	HGiG	Yes	Yes	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)	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	Yes	Yes



		42"	48"	55"	65"	77"	83"
Accessibility	Auto Description	Yes	Yes	Yes	Yes	Yes	Yes
	High Contrast	Yes	Yes	Yes	Yes	Yes	Yes
	Zoom Menu and Text	Yes	Yes	Yes	Yes	Yes	Yes
	SeeColours	Yes	Yes	Yes	Yes	Yes	Yes
	Colours Inversion	Yes	Yes	Yes	Yes	Yes	Yes
	Grayscale	Yes	Yes	Yes	Yes	Yes	Yes
	Auto Picture Off	Yes	Yes	Yes	Yes	Yes	Yes
	Magnification	Yes	Yes	Yes	Yes	Yes	Yes
	Relumino	N/A	N/A	N/A	N/A	N/A	N/A
	Audio Subtitles	Yes	Yes	Yes	Yes	Yes	Yes
	Audio Phone Number	Yes	Yes	Yes	Yes	Yes	Yes
	Closed Caption (Subtitle)	Yes	Yes	Yes	Yes	Yes	Yes
	Multi-output Audio	Yes	Yes	Yes	Yes	Yes	Yes
	Sign Language Zoom	Yes	Yes	Yes	Yes	Yes	Yes
	Caption Position	N/A	N/A	N/A	N/A	N/A	N/A
	Separate Closed Caption	N/A	N/A	N/A	N/A	N/A	N/A
	Slow Button Repeat	Yes	Yes	Yes	Yes	Yes	Yes
	Accessibility Shortcuts Edit	Yes	Yes	Yes	Yes	Yes	Yes
	Learn TV Remote	Yes	Yes	Yes	Yes	Yes	Yes
	Learn Menu Screen	Yes	Yes	Yes	Yes	Yes	Yes
	Accessibility Shortcuts Edit	Yes	Yes	Yes	Yes	Yes	Yes
Auto Menu Sort	Yes	Yes	Yes	Yes	Yes	Yes	
Sensory-friendly Mode	N/A	N/A	N/A	N/A	N/A	N/A	
Voice Guide	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)	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)	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					
	Power Consumption (Max)	195W	230W	420W	510W	660W	740W
	Power Consumption (Stand-by)	0.5 W					
	Power Consumption (Energy Saving Mode)	N/A	N/A	N/A	N/A	N/A	N/A
	Power Consumption (Typical)	66.0W	78.0W	108.0W	138.0W	173.0W	215.0W
	Yearly Power Consumption (EU standard)	244Wh	288kWh	397kWh	507kWh	635kWh	788kWh
	Auto Power Saving	Yes	Yes	Yes	Yes	Yes	Yes
	Auto Power Off	Yes	Yes	Yes	Yes	Yes	Yes
	Eco Sensor	Yes	Yes	Yes	Yes	Yes	Yes
	Energy Efficiency Class	4	4.5	4	4.5	5	4.5

