

# SAMSUNG

## S90D – OLED 4K Smart TV (2024)

Experience the difference of Samsung OLED



**55", 65", 77", 83"**

### Top Features

- OLED** Utilising over 8 million specially engineered self-illuminating pixels for a more precise and brighter picture. Experience deep blacks, clean whites and vibrant colours with Samsung's OLED.<sup>1</sup>
- Dolby Atmos** Lose yourself in the breathtaking realism of cinematic sound, right in your own home. Your Samsung TV features Dolby Atmos support to deliver larger-than-life audio experiences.<sup>2</sup>
- Motion Rate 200** See fast-moving scenes with minimal blur and judder so that you have a sharper and smoother viewing experience watching live sports and action movies.<sup>3</sup>
- HDR OLED+** The Quantum HDR OLED panel allows for HDR10+ content to reveal what you might have missed in particularly dark or light scenes, making them pop with breathtaking colour and contrast.<sup>4</sup>

<sup>1</sup> Compared to previous Samsung Smart TV. Picture quality may vary depending on quality and resolution of source content and viewing conditions.

<sup>2</sup> Source content must be Dolby Atmos® enabled for Dolby Atmos® playback.

<sup>3</sup> Viewing experience may vary according to types of content and format.

<sup>4</sup> Source content must be HDR10+ format. The Range of Quantum HDR claims luminance based on internal testing standards and is subject to change according to viewing environment or specific conditions.

Product	Product Category	55"	65"	77"	83"
		OLED	OLED	OLED	OLED
Model Number		QA65S90DAWXXY	QA65S90DAWXXY	QA77S90DAEXXY	QA83S90DAEXXY
Display	Screen Size	55"	65"	77"	83"
	Resolution	4K (3,840 x 2,160)	4K (3,840 x 2,160)	4K (3,840 x 2,160)	4K (3,840 x 2,160)
	Native Refresh Rate	100Hz	100Hz	100Hz	100Hz
	Motion Rate	200	200	200	200
	Anti Reflection	Yes	Yes	Yes	Yes
Video	Picture Engine	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor	NQ4 AI Gen2 Processor
	HDR (High Dynamic Range)	OLED HDR+	OLED HDR+	OLED HDR+	OLED HDR+
	HDR 10+	Yes (ADAPTIVE/ GAMING)	Yes (ADAPTIVE/ GAMING)	Yes (ADAPTIVE/ GAMING)	Yes (ADAPTIVE/ GAMING)
	AI HDR Remastering	N/A	N/A	N/A	N/A
	HLG (Hybrid Log Gamma)	Yes	Yes	Yes	Yes
	Contrast	Self-illuminating pixels	Self-illuminating pixels	Self-illuminating pixels	Self-illuminating pixels
	Color	Perceptual Colour Mapping	Perceptual Colour Mapping	Perceptual Colour Mapping	Perceptual Color Mapping
	Viewing Angle	Ultra Viewing Angle	Ultra Viewing Angle	Ultra Viewing Angle	Ultra Viewing Angle
	Micro Dimming	N/A	N/A	N/A	N/A
	Contrast Enhancer	Real Depth Enhancer	Real Depth Enhancer	Real Depth Enhancer	Real Depth Enhancer
	Film Mode	Yes	Yes	Yes	Yes
	Expert Calibration	N/A	N/A	N/A	N/A
	Smart Calibration	Basic	Basic	Basic	Basic
	Picture Upscale	4K AI Upscaling	4K AI Upscaling	4K AI Upscaling	4K AI Upscaling
	Filmmaker Mode	Yes	Yes	Yes	Yes
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)	40W	40W	40W	40W
	Speaker Type	2.1CH	2.1CH	2.1CH	2.1CH
	Multiroom Link	No	No	No	No
	Bluetooth Audio	Yes	Yes	Yes	Yes
	Active Voice Amplifier	Yes	Yes	Yes	Yes
	Adaptive Sound	Adaptive Sound Pro	Adaptive Sound Pro	Adaptive Sound Pro	Adaptive Sound Pro
	Buds Auto Switch	Yes	Yes	Yes	Yes

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Smart Service	Operating System	Tizen™ Smart TV	Tizen™ Smart TV	Tizen™ Smart TV	Tizen™ Smart TV
	Bixby	Yes	Yes	Yes	Yes
	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
	Samsung TV Plus	Yes	Yes	Yes	Yes
	Web Browser	Yes	Yes	Yes	Yes
	SmartThings Hub / Matter Hub / IoT-Sensor Functionality	Yes	Yes	Yes	Yes
Smart Feature	Multi Device Experience	TV to Mobile, Mobile to TV, TV initiate mirroring, TV Sound to Mobile, Sound Mirroring, Wireless TV On (requires Android 6.0† with Screen Cast capabilities or iPhone iOS 11.4† with AirPlay 2 support)	TV to Mobile, Mobile to TV, TV initiate mirroring, TV Sound to Mobile, Sound Mirroring, Wireless TV On (requires Android 6.0† with Screen Cast capabilities or iPhone iOS 11.4† with AirPlay 2 support)	TV to Mobile, Mobile to TV, TV initiate mirroring, TV Sound to Mobile, Sound Mirroring, Wireless TV On (requires Android 6.0† with Screen Cast capabilities or iPhone iOS 11.4† with AirPlay 2 support)	TV to Mobile, Mobile to TV, TV initiate mirroring, TV Sound to Mobile, Sound Mirroring, Wireless TV On (requires Android 6.0† with Screen Cast capabilities or iPhone iOS 11.4† with AirPlay 2 support)
	Tap View	Yes (requires Android 8.1† with Screen Cast capabilities)	Yes (requires Android 8.1† with Screen Cast capabilities)	Yes (requires Android 8.1† with Screen Cast capabilities)	Yes (requires Android 8.1† with Screen Cast capabilities)
	Multi-View	Up to 2 videos	Up to 2 videos	Up to 2 videos	Up to 2 videos
	Easy Setup	Yes	Yes	Yes	Yes
	Ambient Mode	Ambient Mode+	Ambient Mode+	Ambient Mode+	Ambient Mode+
	NFT	N/A	N/A	N/A	N/A
	ScreenVitals	Yes	Yes	Yes	Yes
	Apple AirPlay	Yes	Yes	Yes	Yes
Game Feature	HDMI 2.1 Support	Yes (Up to 144Hz/FPS)	Yes (Up to 144Hz/FPS)	Yes (Up to 144Hz/FPS)	Yes (Up to 144Hz/FPS)
	Auto Game Mode (ALLM)	Yes	Yes	Yes	Yes
	Game Motion Plus	Yes	Yes	Yes	Yes
	Dynamic Black EQ	Yes	Yes	Yes	Yes
	Surround Sound	Yes	Yes	Yes	Yes
	Super Ultra Wide Game View	Yes	Yes	Yes	Yes
	MiniMap Zoom	Yes	Yes	Yes	Yes
	Hue Sync	Yes	Yes	Yes	Yes
	FreeSync	FreeSync Premium	FreeSync Premium	FreeSync Premium	FreeSync Premium
	HGiG	Yes	Yes	Yes	Yes
Gaming Hub	Yes (US, CA, KR, BR, UK, FR, DE, IT, ES, MX, AU)	Yes (US, CA, KR, BR, UK, FR, DE, IT, ES, MX, AU)	Yes (US, CA, KR, BR, UK, FR, DE, IT, ES, MX, AU)	Yes (US, CA, KR, BR, UK, FR, DE, IT, ES, MX, AU)	

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Tuner/Broadcasting	Digital Broadcasting	DVB-T(T2 Ready)	DVB-T(T2 Ready)	DVB-T(T2 Ready)	DVB-T(T2 Ready)
	Analog Tuner	Yes	Yes	Yes	Yes
	CI (Common Interface)	N/A	N/A	N/A	N/A
Connectivity	Wi-Fi	Yes (Wi-Fi 5)	Yes (Wi-Fi 5)	Yes (Wi-Fi 5)	Yes (Wi-Fi 5)
	Bluetooth	Yes (BT5.2)	Yes (BT5.2)	Yes (BT5.2)	Yes (BT5.2)
	HDMI	4	4	4	4
	HDMI Maximum Input Rate	4K 144Hz (for HDMI 1/2/3/4)	4K 144Hz (for HDMI 1/2/3/4)	4K 144Hz (for HDMI 1/2/3/4)	4K 144Hz (for HDMI 1/2/3/4)
	HDMI Audio Return Channel	eARC	eARC	eARC	eARC
	One Connect Box	N/A	N/A	N/A	N/A
	Anynet+ (HDMI-CEC)	Yes	Yes	Yes	Yes
	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	1/1(Common Use for Terrestrial)/0	1/1(Common Use for Terrestrial)/0	1/1(Common Use for Terrestrial)/0
Ex-Link ( RS-232C )	N/A	N/A	N/A	N/A	
Design	Design	LaserSlim	LaserSlim	LaserSlim	LaserSlim
	Bezel Type	4 Bezel-less	4 Bezel-less	4 Bezel-less	4 Bezel-less
	Slim Type	Top Slim	Top Slim	Top Slim	Top Slim
	Front Color	GRAPHITE BLACK	GRAPHITE BLACK	GRAPHITE BLACK	GRAPHITE BLACK
	Stand Type	SIMPLE PLUS BLADE	SIMPLE PLUS BLADE	SIMPLE PLUS BLADE	SIMPLE PLUS BLADE
	Stand Color	SPACE TITAN	SPACE TITAN	SPACE TITAN	SPACE TITAN
Additional Feature	Auto Rotation	N/A	N/A	N/A	N/A
	Motion Detection	N/A	N/A	N/A	N/A
	Knox Vault	N/A	N/A	N/A	N/A
	ConnectShare™	Yes	Yes	Yes	Yes
	EPG	Yes	Yes	Yes	Yes
	Extended PVR	Yes	Yes	Yes	Yes
	OSD Language	Local Languages	Local Languages	Local Languages	Local Languages
	Teletext (TTX)	Yes	Yes	Yes	Yes
	MBR Support	Yes	Yes	Yes	Yes

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Accessibility	Voice Guide	AU English, China Chinese, Korean, France French, Italian, German, Spain Spanish, Malay	AU English, China Chinese, Korean, France French, Italian, German, Spain Spanish, Malay	AU English, China Chinese, Korean, France French, Italian, German, Spain Spanish, Malay	AU English, China Chinese, Korean, France French, Italian, German, Spain Spanish, Malay
	Low Vision Support	Audio Subtitles (AU, KR, UK, US Only), Magnification, Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Colour Inversion, Grayscale, Picture Off	Audio Subtitles (AU, KR, UK, US Only), Magnification, Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Colour Inversion, Grayscale, Picture Off	Audio Subtitles (AU, KR, UK, US Only), Magnification, Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Colour Inversion, Grayscale, Picture Off	Audio Subtitles (AU, KR, UK, US Only), Magnification, Audio Description, Zoom Menu and Text, High Contrast, SeeColors, Colour Inversion, Grayscale, Picture Off
	Hearing Impaired Support	Closed Caption (Subtitle), Multi-output Audio, Sign Language Zoom	Closed Caption (Subtitle), Multi-output Audio, Sign Language Zoom	Closed Caption (Subtitle), Multi-output Audio, Sign Language Zoom	Closed Caption (Subtitle), Multi-output Audio, Sign Language Zoom
	Motor Impaired Support	Slow Button Repeat, Remote Control App. for All	Slow Button Repeat, Remote Control App. for All	Slow Button Repeat, Remote Control App. for All	Slow Button Repeat, Remote Control App. for All
Power & Eco Solution	Power Supply	AC220-240V~50/60Hz	AC220-240V~50/60Hz	AC220-240V~50/60Hz	AC220-240V~50/60Hz
	Power Consumption (Max)	290 W	390 W	490 W	670 W
	Power Consumption (Stand-by)	0.5 W	0.5 W	0.5 W	0.5 W
	Power Consumption (Typical)	112.0 W	146.0 W	175.0 W	217.0 W
	Power Consumption (Energy Saving Mode)	N/A	N/A	N/A	N/A
	Yearly Power Consumption (EU standard)	412 kWh	536 kWh	642 kWh	795 kWh
	Eco Sensor	Yes	Yes	Yes	Yes
	Auto Power Saving	Yes	Yes	Yes	Yes
	Energy Efficiency Class	4	4	5	4.5
Auto Power Off	Yes	Yes	Yes	Yes	
Dimension	Package Size (WxHxD)	1385 x 832 x 153 mm	1617 x 950 x 160 mm	1885 x 1154 x 180 mm	2024 x 1234 x 189 mm
	Set Size with Stand (WxHxD)	1225.4 x 773.6 x 265.2 mm	1444.3 x 896.7 x 265.2 mm	1718.5 x 1058.6 x 359.0 mm	1851.0 x 1133.7 x 359.0 mm
	Set Size without Stand (WxHxD)	1225.4 x 708.6 x 39.9 mm	1444.3 x 831.7 x 39.9 mm	1718.5 x 987.6 x 44.9 mm	1851.0 x 1062.8 x 44.9 mm
	Stand (Basic) (WxD)	366.0 x 265.2 mm	366.0 x 265.2 mm	366.0 x 359.0 mm	366.0 x 359.0 mm
	Stand (Minimum) (WxD)	N/A	N/A	N/A	N/A
	VESA Spec	300 x 200 mm	300 x 200 mm	400 x 300 mm	400 x 300 mm
Weight	Package Weight	22.9 kg	29.9 kg	44.9 kg	52.1 kg
	Set Weight with Stand	17.3 kg	22.5 kg	34.2 kg	39.4 kg
	Set Weight without Stand	16.0 kg	21.2 kg	32.4 kg	37.6 kg

Accessory	55"	65"	77"	83"
Remote Controller Model	TM2360E	TM2360E	TM2360E	TM2360E
Batteries (for Remote Control)	N/A	N/A	N/A	N/A
Slim Fit Wall-mount Support	Yes	Yes	N/A	N/A
Studio Stand Support	N/A	N/A	N/A	N/A
Auto-Rotation Accessory 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	Built-In	Built-In	Built-In	Built-In
User Manual	Yes	Yes	Yes	Yes
Power Cable	Yes	Yes	Yes	Yes