CLASS HIERARCHY

- Micro RGB
- OLED
- ▶ **Neo QLED**
- Mini LED
- Crystal UHD

SIZE CLASS

85"	QN85QN90HAFXZA

Samsung Vision AI | Dolby Atmos | HDR10+ Adaptive / Gaming | Up to 144Hz[3] | AMD FreeSync Premium Pro | Pantone Validated

Enjoy a spectacular 4K picture, made better with vibrant color from Quantum Dot technology. The AI-powered processor optimizes brightness and contrast for more precise viewing - upscaling your content to 4K and enhancing SDR content to HDR.[1] Plus, experience content with ultra-smooth motion for video games and without distracting glare from overhead lights or sunny windows.

TOP 10 KEY FEATURES

1. Quantum Mini LED Full Array
2. NQ4 AI Gen2 Processor[2]
3. Motion Xcelerator 144Hz[3]
4. Glare Free
5. Supersize Picture Enhancer
6. 4K AI Upscaling[2]
7. Auto HDR Remastering
8. Color Booster Pro[1]
9. Active Voice Amplifier Pro and Adaptive Sound Pro
10. Dolby Atmos and Object Tracking Sound Lite

PICTURE (PANEL)

Display Type: Neo QLED 4K
Refresh Rate: 144Hz (VRR Support)
Lighting Technology: Quantum Mini LED
Display Resolution: 4K (3,840 x 2,160)
Anti Reflection: Glare Free
Viewing Angle: Wide Viewing Angle
Dimming Technology: Ultimate Mini LED Dimming

PICTURE (PROCESSING)

Processor: NQ4 AI Gen2 Processor[2]
Upscaling: 4K AI Upscaling
Variable Refresh Rate (VRR): Yes
Motion Handling: Motion Xcelerator 144Hz[3]
DLG (Dual Line Gate): 240Hz
Contrast Enhancer: Real Depth Enhancer
Object Motion Enhancing: N/A
Color: Quantum Dot Display
Color Booster: Pro[1]
HDR (High Dynamic Range): Neo Quantum HDR+
HDR10+: Yes (Adaptive/Gaming/Advanced)
Auto HDR Remastering: Yes
Supersize Picture Enhancer: Yes

AUDIO

Speaker Type: 2CH
Output Power (W): 30W
Dolby Atmos: Yes
Object Tracking Sound (OTS): OTS Lite
Q-Symphony: Yes[5]
Active Voice Amplifier (AVA): AVA Pro
Adaptive Sound: Pro
Bluetooth Audio: Yes

DESIGN

TV Design: Monolith Edge
Bezel Type: 3 Bezel-less
Front Color: Titan Black
Stand Type: Round Feet
Stand Color: Black
Adjustable Stand: Yes

CONNECTIVITY

Wi-Fi: Yes (Wi-Fi 6E)
Bluetooth: Yes (BT5.3)
One Connect Box: N/A
HDMI Inputs[6]: 4 Ports
HDMI Maximum Input Rate: 4K 144Hz (for HDMI 1/2/3/4)
HDMI Audio Return Channel: eARC
HDMI-CEC: Yes
USB Ports: 2 x USB-A
Ethernet (LAN): Yes
Digital Audio Out (Optical): Yes
RF Connection: Yes
RS-232C Input: Yes

Samsung Vision AI[7]

Vision AI Companion: Yes[4]
AI Soccer Mode: Yes
AI Sound Controller: Yes
Live Translate: Yes
Generative Wallpaper: Yes
Multi AI Agents: Yes

TV ART FEATURES

Art Mode: NA
Art Store: Yes[8]

SMART TV FEATURES[9]

Operating System: Tizen™ Smart TV
Free Ad Support TV: Samsung TV Plus
Smart Home Connectivity: SmartThings[10] Hub, Matter Hub / IoT-Sensor Functionality / Quick Remote
Smart Assistants (Built-In): Bixby, Alexa
Smart Assistants (Works with): Google Assistant
Far-Field Voice Interations: Yes
Web Browser: Yes
Samsung Health: Yes[11]
Multi Device Experience: Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On
Multi-View: Up to 2 videos
Works with Apple Airplay: Yes
Works with Google Cast: Yes
Now Brief: Yes Voice/User Detection
Karaoke Mic: Yes
Storage Share: Yes

GAMING

Gaming Hub: Yes[12]
Cloud Gaming: Yes - Xbox, NVIDIA GeForce Now, Luna, Blacknut, Antstream, Boosteroid
Auto Game Mode: AI Auto Game Mode
ALLM (Auto Low Latency Mode): Yes
Gaming Motion Plus: Yes
Super Ultra Wide Game View[13]: Yes
Game Bar: Yes
Mini Map Zoom: Yes
AMD FreeSync: Freesync Premium™ Pro
NVIDA G-SYNC: N/A
HGiG: Yes
Hue Sync: Yes

SECURITY

Knox Vault: N/A
Knox Security: Yes

POWER

Power Supply (V): AC110-120V~ 50/60Hz
Stand-by Power Consumption (W): 0.5
Max Power Consumption (W): 340W
Eco Sensor: Yes
Auto Power Saving: Yes
Auto Power Off: Yes

INCLUDED ACCESSORIES

Remote Control: BT Simple Remote TM2280A with batteries
Power Cable: Yes
Slim Fit Wall-mount Support: Yes

MODELS

MODEL: QN85QN90H
ORDER CODE: QN85QN90HAFXZA

SCREEN SIZE CLASS: 85"

SCREEN DIAGONAL MEASUREMENT: 84.5"

UPC CODE: 198957428432

COUNTRY OF ORIGIN: MEXICO

DIMENSIONS (INCHES W X H X D):
- TV without Stand: 74.4 x 42.6 x 2.1
- TV with Stand: 74.4 x 44.2 x 14.5
- Distance between stand (Default): 64"
- Distance between stand (Minimum): 14.2"
- Shipping: 72" x 42.3" x 6.5"

WEIGHT (LB):
- TV without Stand: 70.8
- TV with Stand: 72.3
- Shipping: 102.1

VESA SUPPORT: YES (600 X 400)

ACCESSORIES INCLUDED IN BOX:
- Remote Model: BT Simple Remote TM2280A with batteries
- Power Cable
- USER Manual

WARRANTY: CLICK HERE

[1] Utilizes AI-Based formulas.
[2] Utilizes AI-Based formulas to upscale to 4K resolution. Resulting picture may vary based on source content.
[3] 4K 144Hz is only available with PC-connected games that support such specifications (PC graphic card required). Performance may vary.
[4] AI inputs and queries may be recorded and shared with 3rd party providers. Requires Samsung account and consent to Viewing Information Service; must be 18 years or older. Accuracy not guaranteed. Check results. Utilizes AI-based formulas.
[5] Q-Symphony requires a compatible 2020-2026 Samsung TV. Please refer to samsung.com for more information.
[6] HDMI-CEC (Consumer Electronics Control) facilitates convenient control functions with compatible devices.
[7] Samsung Vision AI features vary by model; see individual model for more info.
[8] Fees apply to subscription service.
[9] Samsung Account required for network-based smart services, including streaming apps and other smart features. Separate [connected] computer, mobile or other device may be necessary to create/log into Samsung Account (free to download and create). Without Account login, only external device connections (e.g., via HDMI) and terrestrial/over-the-air TV (only for TVs with tuners) available.
[10] SmartThings require compatible devices only. SmartThings app download may be required.
[11] Subscriptions may be required for some services. Smart Trainer support devices may vary by country.
[12] High speed internet connection, additional gaming service subscriptions and compatible controller required.
[13] Super Ultrawide Game View is supported for PC games only. This is feature is only available for ultra wide supported games. Some game titles may not support this function or may be limited to use this feature. Screen resolution change from external device may be required.