



CLASS HIERARCHY

Neo QLED 8K	
Neo QLED 4K	OLED 4K
QLED 4K	
Crystal UHD 4K	
FHD, HD	

SIZE CLASS

98"	QN98QN90F



Our best 4K AI processor powers Samsung Vision AI<sup>1</sup> for enhanced picture, sound, and breakthrough TV experiences. Quantum Matrix Mini LEDs unlock bright detail on a glare-free screen, for distraction-free viewing in the bright rooms. Top speakers<sup>2</sup> provide multi-dimensional AI-enhanced<sup>3</sup> sound that tracks to on-screen motion.

TOP 10 KEY FEATURES

1. NQ4 AI Gen3 Processor <sup>4</sup>	6. Motion Xcelerator165Hz <sup>5</sup>
2. Supersize Picture Enhancer	7. AI Motion Enhancer Pro <sup>3</sup>
3. Glare Free	8. Auto HDR Remastering Pro
4. Neo Quantum HDR+	9. Dolby Atmos
5. 4K AI Upscaling Pro <sup>4</sup>	10. Endless Free Content <sup>6</sup>

PICTURE (PANEL)

Display Type: Neo QLED 4K
Refresh Rate: 120Hz (Up to 165Hz)
Lighting Technology: Quantum Matrix Technology Plus
Display Resolution: 4K (3,840 x 2,160)
Anti Reflection: Glare Free
Viewing Angle: Wide Viewing Angle
Dimming Technology: Ultimate UHD Dimming

PICTURE (PROCESSING)

Processor: NQ4 AI Gen3 Processor <sup>4</sup>
Upscaling: 4K AI Upscaling Pro <sup>4</sup>
Variable Refresh Rate (VRR): Yes
Motion Handling: Motion Xcelerator 165Hz <sup>5</sup>
Contrast Enhancer: Real Depth Enhancer Pro
Object Motion Enhancing: AI Motion Enhancer Pro
Color: Color Booster Pro
EyeComfort Pro: Yes
HDR (High Dynamic Range): Neo Quantum HDR+
HDR10+: Yes (Adaptive/Gaming)
Auto HDR Remastering: Pro
Adaptive Picture: AI Optimized/AI Customization
Supersize Picture Enhancer: Yes

AUDIO

Speaker Type: 4.2.2CH
Output Power: 60W
Dolby Atmos: Yes
Object Tracking Sound (OTS): OTS+
Q-Symphony: Yes
Active Voice Amplifier (AVA): AVA Pro
Adaptive Sound: Pro
Bluetooth Audio: Yes
360 Audio: Yes

DESIGN

TV Design: NeoSlim
Bezel Type: 3 Bezel-less
Front Color: Titan Black
Stand Type: Sharp Neck Hexagon
Stand Color: Titan Black
Adjustable Stand: N/A

CONNECTIVITY

Wi-Fi: Yes (Wi-Fi 5)
Bluetooth: Yes (BT5.3)
One Connect Box: N/A
HDMI Input: 4 Ports
HDMI Maximum Input Rate: 165Hz (for HDMI 1/2/3/4)
HDMI Audio Return Channel: eARC
HDMI-CEC: Yes
USB Ports: 2 x USB-A
Ethernet (LAN): 1
Digital Audio Out (Optical): 1
RF Connection: 1
RS-232C Input: 1

SAMSUNG VISION AI<sup>1</sup>

Live Translate: Yes <sup>7</sup>
Click to Search: Yes <sup>8</sup>
Generative Wallpaper: Yes
Pet & Family Care: Yes
Home Insight: Yes
Universal Gesture/Quick Control: Yes

TV ART FEATURES

Art Mode: N/A
Art Store: Yes <sup>9</sup>

SMART TV FEATURES<sup>6</sup>

Operating System: One UI Tizen <sup>10</sup>
AI TV: Samsung Vision AI <sup>1</sup>
Free Ad Supported TV: Samsung TV Plus
Smart Home Connectivity: SmartThings, Matter, IoT-Sensor Functionality <sup>11</sup>
Smart Assistants (Built-In): Bixby, Alexa
Smart Assistants (Works with): Google Assistant
Far-Field Voice Interactions: Yes
Web Browser: Yes
SmartThings Hub/Quick Remote/Matter Hub/IoT-Sensor Functionality: Yes
Samsung Health: Yes <sup>12</sup>
Multi Device Experience: TV to Mobile, Mobile to TV, TV initiate mirroring, Sound Mirroring, Wireless TV On, Tap View
Multi-View: Up to 2 Videos
Ambient Mode: N/A
Buds Auto Switch: Yes
Works with Apple Airplay: Yes
Works with Google Cast: Yes
Daily+: Yes
Daily Board: Voice/User Detection
Workout Tracker: Yes
Karaoke Mic: Yes
Multi-Control: Yes
ConneCTime: Yes
Screen Vitals: Yes
Storage Share: Yes

GAMING

Gaming Hub: Yes <sup>13</sup>
Cloud Gaming: Yes - Xbox, NVIDIA GeForce Now, Luna, Blacknut, Antstream, Boosteroid, Utomik
Auto Game Mode: AI Auto Game Mode
ALLM (Auto Low Latency Mode): Yes
Game Motion Plus: Yes
Super Ultra Wide Game View: Yes <sup>14</sup>
Game Bar: Yes
Mini Map Zoom: Yes
VRR Standard: FreeSync Premium™ Pro
HGiG: Yes
Hue Sync: Yes

SECURITY

Knox Vault: N/A
Knox Security: Yes

POWER

Power Supply (V): AC110-120V~ 50/60Hz
Standby Power Consumption (W): 0.5W
Typical Power Consumption (W): 227W
Max Power Consumption (W): 455W

INCLUDED ACCESSORIES

Remote Control: SolarCell™ Remote TM2560E
Power Cable: Yes
Slim Fit Wall-mount Support: Yes

MODELS

MODEL: QN98QN90F ORDER CODE: QN98QN90FAFXZA
SCREEN SIZE CLASS: 98"
SCREEN DIAGONAL MEASUREMENT: 97.5"
UPC CODE: 887276934518
COUNTRY OF ORIGIN: Mexico
DIMENSIONS (INCHES W x H x D): <ul style="list-style-type: none"><li>TV WITHOUT STAND: 86 X 49.2 X 1.2</li><li>TV WITH STAND (LOWEST): 86 X 51.4 X 14.4</li><li>SHIPPING: 93.3 X 55.9 X 10.8</li><li>STAND FOOTPRINT: 18.9 X 11.2 X 14.4</li></ul>
WEIGHT (LB): <ul style="list-style-type: none"><li>TV WITHOUT STAND: 135.4</li><li>TV WITH STAND: 155.6</li><li>SHIPPING: 204.4</li><li>STAND WEIGHT: 20.3</li></ul>
VESA SUPPORT: Yes (600 x 400)
ACCESSORIES INCLUDED IN BOX: <ul style="list-style-type: none"><li>REMOTE MODEL: SOLARCELL™ REMOTE TM2560E</li><li>POWER CABLE</li><li>USER MANUAL</li></ul>
WARRANTY: <a href="#">CLICK HERE</a>

<sup>1</sup>Samsung Vision AI features vary by model, see individual model for more info.  
<sup>2</sup>QN90F 50", 43" have 2.2 and 2 channel speakers respectively.  
<sup>3</sup>Utilizes AI-Based formulas.  
<sup>4</sup>Utilizes AI-Based formulas to upscale to 4K resolution. Resulting picture may vary based on source content.  
<sup>5</sup>165Hz is only available with PC connected games that support such specifications (PC graphic card required). Performance may vary.  
<sup>6</sup>Samsung Account required for network-based smart services, including streaming apps and other smart features. Computer, mobile or other device may be necessary to create/log in to Samsung Account (free to download and create). Without Account log in, only external device connections (e.g., via HDMI) and terrestrial/over-the-air TV (only for TVs with tuners) available. Channels may vary by location and are subject to change. UI is subject to change without prior notice.  
<sup>7</sup>Works with antenna broadcast only. Available languages vary and may require download. Translation accuracy not guaranteed.  
<sup>8</sup>Click to Search Who's On feature only works with terrestrial, cable TV and Samsung TV Plus. Click to Search Watch Next feature utilizes AI based algorithms.  
<sup>9</sup>Fees apply to subscription service. Art pieces in the Art Store are subject to change without prior notice.  
<sup>10</sup>One UI Tizen OS updates are available for up to 7 years from the product release year starting in 2023. Availability, features, contents, apps and services are subject to change without notice and may vary by product and model. OS updates does not cover hardware-related performance, features or durability.  
<sup>11</sup>SmartThings require compatible devices only. SmartThings app download may be required.  
<sup>12</sup>Subscriptions may be required for some services. Smart Trainer support devices may vary by country.  
<sup>13</sup>High speed internet connection, additional gaming service subscriptions and compatible controller required.  
<sup>14</sup>Super Ultrawide Game View is supported for PC games only. This 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.