



Get into an unmatched world of cinematic joy with the new QN90B. This model is known for a truly breathtaking 4K viewing experience and an unparalleled gaming experience. Immerse in life-like detail of a video as the Quantum Matrix Technology and the Neo Quantum Processor 4K visually upscale all your content with an accurate precision. The Quantum HDR 32x creates a dynamic contrast for vivid colours that jump off of the screen, creating a surreal visual treat. Feel like a part of the scene with the signature Dolby Atmos sound experience. A QN90B is all the entertainment you will ever need.

SIZE CLASS

- 85"

QN85QN90BA
- 75"

QN75QN90BA
- 65"

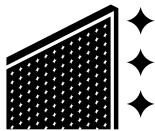
QN65QN90BA
- 55"

QN55QN90BA
- 50"

QN50QN90BA
- 43"

QN43QN90BA

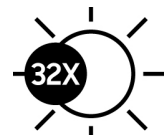
PRODUCT HIGHLIGHTS



Quantum Matrix Technology



Neo Quantum Processor 4K<sup>1</sup>



Quantum HDR 32X<sup>2</sup>



Dolby Atmos<sup>®</sup>

KEY FEATURES

PRODUCT TYPE

- NEO QLED 4K

PICTURE

- Quantum Matrix Technology
  - Quantum Mini LED
  - Local Brightness Booster
  - Shape adaptive light control
  - 14-bit processing (Detail boosted deep black)  
\*50"/43" QN90B: 12-bit
- Neo Quantum Processor 4K<sup>1</sup>
  - 4K AI Upscaling
  - Real Depth Enhancer
  - Ultra-precision light driving
  - Perceptual color mapping
- Quantum HDR 32x (50" below 24x)<sup>2</sup>

- Anti Reflection
  - Anti-glare film
  - EyeComfort Mode
  - Ultra Viewing Angle  
(50"/43" has Wide Viewing Angle)
- Smart Calibration
- Expert Calibration

SOUND

- OTS+ (50"/43" OTS Lite)
  - AI sound
  - Voice tracking sound
  - Compatible with Q-Symphony
  - 60W 4.2.2 ch speaker  
(50" 40W 2.2 ch/43" 20W 2.0ch speakers)
- Dolby Atmos<sup>®</sup>
  - Top channel speakers
- Active Voice Amplifier (AVA)
- Adaptive Sound+

DESIGN

- SolarCell Remote<sup>TM3</sup>
- Ambient Mode+<sup>4</sup>
- NeoSlim Design

EXPERIENCE

GAMING

- Motion Xcelerator Turbo+ (50"/43" Motion Xcelerator Turbo Pro)
  - Game Motion Plus
  - Motion Estimation, Motion Compensation (MEMC)
  - FreeSync Premium Pro<sup>5</sup>
  - Super Ultrawide Game View & Game Bar 2.0<sup>6</sup>
  - Auto Low Latency Mode (ALLM)<sup>7</sup>
  - VRR
  - 4K @ 120Hz (50"/43" supports 4K144Hz)

- Video Call Applications<sup>8</sup>
  - Google Duo
  - Watch Together<sup>9</sup>
  - Microsoft Teams for work
  - Microsoft Teams for life
  - Smart camera feature
  - Compatible with Samsung Slim Fit cam
  - Compatible with mobile camera
- Smart Feature
- Multi View (up to 2 videos)<sup>10</sup>
- Tap View<sup>11</sup>
- Workspace<sup>12</sup>
  - Workspace – Easy Connection application
  - Mobile Wireless DeX
  - Web service
  - Screen sharing
- Smart Hub<sup>13</sup>
  - Smart Hub UI
  - Samsung TV Plus
  - Easy content discovery & Personalized recommendation
  - Tailored home screen and easy accessibility
  - Gaming Hub and cloud game application
  - Ambient Mode with NFT artworks
- SmartThings<sup>14</sup>
  - Built-in hub
  - SmartThings ecosystem
  - Map View UI
  - Always On Voice compatibility
- Multiple Voice Assistant<sup>15</sup>  
(Bixby, Amazon Alexa, Google\*)
- Samsung Health<sup>16</sup>
  - Diverse wellness content library
  - Smart Trainer with mobile phone camera
  - Galaxy Watch 4 integration

## CONNECTIVITY

- 4 HDMI Connections
- 2 USB Connections
- LAN Port
- Built-in Wi-Fi (5E)
- Bluetooth (BT5.2)
- RS232 Control (USB to EX-Link)

## INDUSTRY CERTIFICATIONS

- HLG
- HDR10
- HDR 10+ Adaptive
- HDR10+ Gaming

## QN90B TV HIGHLIGHTS

### QUANTUM MATRIX TECHNOLOGY

Evolution of Neo QLED comes with Quantum Matrix Technology, which precisely controls our exclusive new Quantum Mini LED. With accurate light control, you can enjoy great detail in both the darkest and brightest scenes.

### NEO QUANTUM PROCESSOR 4K<sup>1</sup>

Samsung's powerful quantum processor with deep learning creates a precise and adaptive experience. Scene-by-scene, the processor optimizes your viewing condition and improves your content. Powerful 4K AI upscaling ensures you always get near 4K resolution.

<sup>1</sup> 4K AI Upscaling enhances content to near-4K picture quality. Based on laboratory testing. Viewing experience may vary according to types of content and format. 4K AI Upscaling may not apply to PC connection, and certain conditions of Game Mode.

### QUANTUM HDR 32X<sup>2</sup>

Every nuance and detail comes to life with rich, accurate colour and deeper contrast. The dynamic tone mapping of HDR10+ shifts colour and contrast scene by scene, allowing you to appreciate even minor details.

<sup>2</sup> for 50/43 Quantum HDR 24x. The range of Quantum HDR luminance is based on internal testing standards and subject to change according to viewing conditions or specifications.

### DOLBY ATMOS<sup>®</sup>

Samsung's new top channel speakers deliver a next level Dolby Atmos experience that will immerse you in the action with multi-dimensional sound. With the addition of Samsung's top channel speakers and Dolby Atmos, Neo QLED delivers an incredible audio experience.

## PICTURE

### ANTI REFLECTION

Don't let the brightness of the sun to interrupt the midday match, or lamp reflections to ruin your evening movie. Our critically acclaimed Anti Reflection technology allows less distractions from reflecting light from any seat in the house, which means you can lose yourself in the latest blockbuster.

### SMART CALIBRATION

Meet the innovative, all-in-one image optimization solution that allows you to calibrate your screen with a touch of a button from your smartphone. Within only 15-30 seconds, you can quickly calibrate your screen to enjoy creator's intention.

### EXPERT CALIBRATION

It delivers high-fidelity colour reproduction that's true to the original content and can even adapt to the subtlest changes in colour. So, you can enjoy the picture with professional-grade colour-calibrated accuracy in the home.

## SOUND

### OBJECT TRACKING SOUND+ (50" / 43" OTS LITE)

With built-in speakers, you can experience vividly realistic 3D sound that puts you in the middle of the action.

### ACTIVE VOICE AMPLIFIER (AVA)

Newly added real-time noise intelligence. When noise occurs in the living environment, it could disturb viewers. However, AVA helps emphasize voice of the scene so that the TV can deliver clear dialogues to viewers.

### ADAPTIVE SOUND+

Adaptive sound has audio scenic intelligence that optimizes sound based on real time scene analysis by content type.

## DESIGN

### SOLARCELL REMOTE<sup>TM3</sup>

With a solar panel on its back that you can use for charging, you don't need to use disposable batteries anymore. Also, you can enjoy new smart features such as a built-in microphone with a voice assistant, so it is innovative in more ways than one.

<sup>3</sup> To charge the remote with solar energy, set the TV remote down with the solar panel facing up. Place it in your living room while your lights are turned on, or you can place it near a window where it will soak in natural sunlight.

### AMBIENT MODE+<sup>4</sup>

Watch your TV disappear, blending into the walls of your home. It's no mere decoration, because even in ambient mode, your TV is ready to push and pull useful information and entertainment whenever you need it. This content floats on the translucent screen, adjusting with time and light so it always fits in your living space.

<sup>4</sup> Background feature accuracy may vary based on TV location, dependent on wall designs, patterns, and/or colours.

### NEOSLIM DESIGN

Graceful, ultra slim sleek design looks beautiful from any angle like a fine piece of art.

## EXPERIENCE

### MOTION XCELERATOR TURBO+

Conquer every enemy, even at soaring speeds. With exceptional motion enhancements up to 4K120Hz, you can enjoy gameplay with ultra-smooth action without lag and motion blur.

### Freesync PREMIUM PRO<sup>5</sup>

Building on AMD FreeSync<sup>™</sup> core technology to reduce stutter and screen tearing, TVs with the AMD FreeSync<sup>™</sup> Premium Pro tier provide a fantastic HDR gaming experience. Enjoy a combination of smooth gaming at peak performance, and

exceptional high dynamic range visuals while still maintaining low latency for effortlessly smooth gameplay.

<sup>5</sup> Viewing experience may vary according to types of content and graphics processing unit.

### SUPER ULTRAWIDE GAME VIEW & GAME BAR 2.0<sup>6</sup>

Bigger and wider TV screens with 21:9 and 32:9 ratios allow you to have more viewing area and give you best gaming experience for winning. Also, display Game Bar allows you to optimize your gameplay with a comprehensive menu, such as screen ratio adjustment, input lag check, FPS, HDR, wireless headset and more.

<sup>6</sup> Super Ultrawide GameView is available for ultra wide supported games and PC games only. Some game titles may not support or be limited in the use of this function. Screen resolution change from external device may be required. Zoom-in mode is available for 21:9, 32:9 resolution.

### AUTO LOW LATENCY MODE (ALLM)<sup>7</sup>

Get into the game faster with Auto Low Latency Mode (ALLM), which optimizes your screen so you have more controls with barely noticeable input lag. Experience smooth gaming in its most impressive form without motion blur and judder.

<sup>7</sup> Low input lag is measured based on internal testing conditions and it is subject to change according to game setting or specific conditions.

### VIDEO CALL APPLICATIONS<sup>8</sup>

Connect your video call applications seamlessly to your screen and spend time with your loved ones on a bigger screen. With wider partnership with Google Duo and Microsoft teams, you can have the option to pick and choose your preferred application. Also, now you can connect your own mobile camera in addition to Samsung Slim Fit cam and Logitech webcam, which makes accessing video calling easier.

<sup>8</sup> Additional compatible Samsung Slim Fit cam, compatible Logitech webcam or mobile camera required. Sold separately.

### WATCH TOGETHER<sup>9</sup>

Stay connected, and stream together with Watch Together app. We've merged the TV video calling capability that Samsung users already love with live programming. Users can simply click "watch together" on their call screens to watch and share your favourite content.

<sup>9</sup> Feature may not be available at time of launch.

### MULTI VIEW (UP TO 2 VIDEOS)<sup>10</sup>

Mobile on the same screen at the same time. Whether it's live stats for sports or cheat videos for games, simply connect your phone and multi-screen to see both simultaneously. You can also enjoy optimized multi-tasking such as ultrawide game and vertical state, and simply add-up content to watch it all simultaneously or make your own combination.

<sup>10</sup> Supports Android OS and iOS based smartphone.

### TAP VIEW<sup>11</sup>

Mirroring movies or music from your mobile to TV is as simple as a tap. When you tap your TV with your mobile, the TV senses the tap and mirrors it automatically. So it's quick and easy to switch to the TV and continue enjoying your favourite content.

<sup>11</sup> Tap View is available on Samsung Galaxy devices with Android OS 8.1 and higher.

### WORKSPACE<sup>12</sup>

Discover more of what you can do. Easily access your PC, Laptop, and mobile seamlessly on your TV.

<sup>12</sup> Compatible with certain PC and mobile devices. Easy Connection application is available on PCs running the Windows 10 OS. Samsung DeX is supported on selected Galaxy, Note, and Tab devices. Most functions of Workspace can be used by connecting the keyboard and mouse to the TV.

### SMART HUB<sup>13</sup>

Samsung's new Smart Hub puts content curation and discovery front and center, so you spend less time searching and more time streaming movies, games, and shows. With three categories—Media, Game, and Ambient—Samsung optimizes your TV experience based on how you use your TV.

<sup>13</sup> Content services and recommendation may vary by regions. Agreement of the Smart Hub Terms and Conditions and Privacy Policy is required before use. Some services are available to watch after registration and subscription.

### SMARTTHINGS<sup>14</sup>

Let your TV automatically detect and instantly connect all your devices near your TV. SmartThings not only supports mobile/cam/IoT/Smart appliances but also supports legacy appliances. You can control devices directly with remote or voice when watching TV.

<sup>14</sup> Available technology, functions and features may vary by country, service provider, network environment or product, and are subject to change without notice. Requires a Wi-Fi, Bluetooth or other wireless network connection and devices registered to SmartThings app. Connected devices are sold separately.

### MULTIPLE VOICE ASSISTANTS<sup>15</sup> (BIXBY, AMAZON ALEXA, GOOGLE\*)

Choose your favourite voice assistant; Bixby or Amazon Alexa. For the first time, all are built into your Samsung TV to provide the optimal entertainment experience and advanced control in your connected home.

<sup>15</sup> Samsung may at any time and in its sole discretion without prior warning or notice change the voice assistant services or suspend and/or cease providing the voice assistant services or any part of the voice assistant services. Content, TV services and capabilities pictured may not be available in all regions and territories. Bixby voice commands recognize English (US/UK), French, Spanish, German, Italian, Chinese and Korean. Not all accents, dialects and expressions recognized. Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

### SAMSUNG HEALTH<sup>16</sup>

New eco on TV that comes with better lives. Master your exercise with camera-powered coaching, keep track of your daily stats synced from Samsung Health application and access content from leading fitness and mindfulness industry partners, all in one place.

<sup>16</sup> Smart Trainer support devices may vary by country. Partners and content may vary by region.

## SPECIFICATIONS

**MODEL CODE:** QN85QN90BAFXZC**SCREEN SIZE CLASS:** 85"**SCREEN DIAGONAL MEASUREMENT:** 84.5**UPC CODE:** 887276616520**COUNTRY OF ORIGIN:** MEXICO**DIMENSIONS (MM W X H X D):**

- SET SIZE WITHOUT STAND (MM): 1892.2 X 1081.9 X 27.2
- SET SIZE WITH STAND (MM): 1892.2 X 1144.3 X 365.5
- PACKAGE SIZE (MM): 2087 X 1267 X 223

**WEIGHT (KG):**

- SET WEIGHT WITHOUT STAND: 44.5
- SET WEIGHT WITH STAND: 56.7
- PACKAGE WEIGHT: 70
- STAND WEIGHT: 12.2

**VESA SUPPORT:** YES (600MM X 400MM)**ACCESSORIES INCLUDED IN BOX:**

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

**MODEL CODE:** QN75QN90BAFXZC**SCREEN SIZE CLASS:** 75"**SCREEN DIAGONAL MEASUREMENT:** 74.5**UPC CODE:** 887276616537**COUNTRY OF ORIGIN:** MEXICO**DIMENSIONS (MM W X H X D):**

- SET SIZE WITHOUT STAND (MM): 1670 X 957.4 X 26.7
- SET SIZE WITH STAND (MM): 1670 X 1020 X 317.9
- PACKAGE SIZE (MM): 1841 X 1127 X 198

**WEIGHT (KG):**

- SET WEIGHT WITHOUT STAND: 35
- SET WEIGHT WITH STAND: 44.8
- PACKAGE WEIGHT: 55
- STAND WEIGHT: 9.8

**VESA SUPPORT:** YES (400MM X 400MM)**ACCESSORIES INCLUDED IN BOX:**

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

## SPECIFICATIONS

**MODEL CODE:** QN65QN90BAFXZC**SCREEN SIZE CLASS:** 65"**SCREEN DIAGONAL MEASUREMENT:** 64.5**UPC CODE:** 887276616490**COUNTRY OF ORIGIN:** MEXICO**DIMENSIONS (MM W X H X D):**

- SET SIZE WITHOUT STAND (MM): 1446.3 X 828.7 X 25.9
- SET SIZE WITH STAND (MM): 1446.3 X 891.4 X 285.7
- PACKAGE SIZE (MM): 1621 X 947 X 186

**WEIGHT (KG):**

- SET WEIGHT WITHOUT STAND: 24.4
- SET WEIGHT WITH STAND: 31.4
- PACKAGE WEIGHT: 39.4
- STAND WEIGHT: 7.0

**VESA SUPPORT:** YES (400MM X 300MM)**ACCESSORIES INCLUDED IN BOX:**

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

**MODEL CODE:** QN55QN90BAFXZC**SCREEN SIZE CLASS:** 55"**SCREEN DIAGONAL MEASUREMENT:** 54.6**UPC CODE:** 887276616476**COUNTRY OF ORIGIN:** MEXICO**DIMENSIONS (MM W X H X D):**

- SET SIZE WITHOUT STAND (MM): 1227.4 X 768 X 235.6
- SET SIZE WITH STAND (MM): 1227.4 X 768 X 235.6
- PACKAGE SIZE (MM): 1409 X 844 X 177

**WEIGHT (KG):**

- SET WEIGHT WITHOUT STAND: 17.7
- SET WEIGHT WITH STAND: 21.9
- PACKAGE WEIGHT: 28
- STAND WEIGHT: 4.2

**VESA SUPPORT:** YES (200MM X 200MM)**ACCESSORIES INCLUDED IN BOX:**

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

## SPECIFICATIONS

MODEL CODE: QN50QN90BAFXZC

SCREEN SIZE CLASS: 50"

SCREEN DIAGONAL MEASUREMENT: 49.5

UPC CODE: 887276616483

COUNTRY OF ORIGIN: MEXICO

## DIMENSIONS (MM W X H X D):

- SET SIZE WITHOUT STAND (MM): 1113.6 X 644.1 X 26.9
- SET SIZE WITH STAND (MM): 1113.6 X 708.9 X 223
- PACKAGE SIZE (MM): 1261 X 771 X 144

## WEIGHT (KG):

- SET WEIGHT WITHOUT STAND: 14
- SET WEIGHT WITH STAND: 18.6
- PACKAGE WEIGHT: 22
- STAND WEIGHT: 4.6

VESA SUPPORT: YES (200MM X 200MM)

## ACCESSORIES INCLUDED IN BOX:

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

MODEL CODE: QN43QN90BAFXZC

SCREEN SIZE CLASS: 43"

SCREEN DIAGONAL MEASUREMENT: 42.5

UPC CODE: 887276616469

COUNTRY OF ORIGIN: MEXICO

## DIMENSIONS (MM W X H X D):

- SET SIZE WITHOUT STAND (MM): 960.8 X 558.9 X 26.9
- SET SIZE WITH STAND (MM): 960.8 X 623.4 X 223
- PACKAGE SIZE (MM): 1105 X 687 X 144

## WEIGHT (KG):

- SET WEIGHT WITHOUT STAND: 9.2
- SET WEIGHT WITH STAND: 13.8
- PACKAGE WEIGHT: 17.6
- STAND WEIGHT: 4.6

VESA SUPPORT: YES (200MM X 200MM)

## ACCESSORIES INCLUDED IN BOX:

- REMOTE CONTROLLER MODEL: YES
- REMOTE CONTROLLER MODEL CODE: TM2280E
- SAMSUNG SMART CONTROL (INCLUDED): YES

## ASSETS

## ACCESS QN90B TV ASSETS ON MICROSOFT TEAMS

[Product Images](#)[Logos](#)[Lifestyle Images](#)[Product Beauty Images](#)[Key Feature Images](#)

If you do not have a Teams account, please email [teamsaccess@cheil.com](mailto:teamsaccess@cheil.com) for access.