



ENERGY STAR CERTIFIED Televisions

Samsung - QN50QN90DAF : QN50QN90DAF

Specifications

ENERGY STAR Unique ID:	3354304
Brand Name:	Samsung
Model Number:	QN50QN90DAF
Model Name:	QN50QN90DAF
Application:	Consumer
Display Type:	QD-LED (QLED)
Backlight Technology Type:	Direct-lit LED
Resolution Format:	4K (UHD)
Native Vertical Resolution (pixels):	2160
Native Horizontal Resolution (pixels):	3840
High Contrast Ratio (HCR) Display:	No
Automatic Brightness Control:	Yes
Is Automatic Brightness Control Enabled by Default in the Default SDR Preset Picture Setting When Television is Shipped?:	No
Low Power Wireless Technologies Supported:	Bluetooth
Features:	High Dynamic Range Upscaling,Wake-On-Cast Compatibility,Control Via Remote Control App,Control Via Smart Speaker,Upconversion,Motion-based Dynamic Dimming (MDD) (also known as Motion Eye Care),Automatic Brightness Control,User Adjustable Backlight
Reported Annual Energy Consumption (kWh):	165.5
Power Consumption in Standby Mode when Not Connected to a Network (watts):	0.3
Power Consumption in Standby Mode when Connected to a Network (watts):	0.4
Average On Mode Power Consumption for Certification (watts):	74.27
Reported On Mode Power (per the Federal Test Procedure) (watts):	74.27
Diagonal Viewable Screen Size (in.):	49.5
Date Certified:	2023-12-17
Markets:	United States
ENERGY STAR Certified:	Yes

Additional Model Information

QN50QN90DDF,QN50QN90DDF,Same as basic model except model designation; QN50QN92DAF,QN50QN92DAF,Same as basic model except model designation

Captured On:
04/24/2025