NETWORK Technology

GSM / CDMA / HSPA / EVDO / LTE

LAUNCH Announced 2019, August 07

Status Available. Released 2019, August 23

BODY Dimensions 162.3 x 77.2 x 7.9 mm (6.39 x 3.04 x 0.31 in)

Weight 196 g (6.91 oz)

Build Glass front (Gorilla Glass 6), glass back (Gorilla Glass 6), aluminum frame

SIM Single SIM (Nano-SIM) or Hybrid Dual SIM (Nano-SIM, dual stand-by)

IP68 dust/water resistant (up to 1.5m for 30 mins)

Stylus, 42ms latency (Bluetooth integration, accelerometer, gyro)

DISPLAY Type Dynamic AMOLED, HDR10+

Size 6.8 inches, 114.0 cm2 (~91.0% screen-to-body ratio)

Resolution 1440 x 3040 pixels, 19:9 ratio (~498 ppi density)

Protection Corning Gorilla Glass 6

Always-on display

PLATFORM OS Android 9.0 (Pie), upgradable to Android 12, One UI 4

Chipset Exynos 9825 (7 nm) - EMEA/LATAM

Qualcomm SM8150 Snapdragon 855 (7 nm) - USA/China

CPU Octa-core (2x2.73 GHz Mongoose M4 & 2x2.4 GHz Cortex-A75 & 4x1.9 GHz Cortex-A55) - EMEA/LATAM

Octa-core (1x2.84 GHz Kryo 485 & 3x2.42 GHz Kryo 485 & 4x1.78 GHz Kryo 485) - USA/China

GPU Mali-G76 MP12 - EMEA/LATAM

Adreno 640 - USA/China

MEMORY Card slot microSDXC (uses shared SIM slot) - dual SIM model only

Internal 256GB 12GB RAM, 512GB 12GB RAM

UFS 3.0

MAIN CAMERA Quad 12 MP, f/1.5-2.4, 27mm (wide), 1/2.55", 1.4µm, Dual Pixel PDAF, OIS

12 MP, f/2.1, 52mm (telephoto), 1/3.6", 1.0µm, PDAF, OIS, 2x optical zoom

16 MP, f/2.2, 12mm (ultrawide), 1/3.1", 1.0µm, Super Steady video

0.3 MP, TOF 3D, (depth)

Features LED flash, auto-HDR, panorama

Video 4K@30/60fps, 1080p@30/60/240fps, 720p@960fps, HDR10+, stereo sound rec., gyro-EIS & OIS

SELFIE CAMERA Single 10 MP, f/2.2, 26mm (wide), 1/3", 1.22µm, Dual Pixel PDAF

Features Dual video call, Auto-HDR

Video 4K@30/60fps

SOUND Loudspeaker Yes, with stereo speakers

3.5mm jack No

32-bit/384kHz audio

Tuned by AKG

COMMS WLAN Wi-Fi 802.11 a/b/g/n/ac/6, dual-band, Wi-Fi Direct, hotspot

Bluetooth 5.0, A2DP, LE, aptX

GPS Yes, with A-GPS, GLONASS, BDS, GALILEO

NFC Yes

Radio FM radio (USA & Canada only)

USB USB Type-C 3.1

FEATURES Sensors Fingerprint (under display, ultrasonic), accelerometer, gyro, proximity, compass, barometer

Samsung DeX, Samsung Wireless DeX (desktop experience support)

ANT+

Bixby natural language commands and dictation

Samsung Pay (Visa, MasterCard certified)

BATTERY Type Li-Ion 4300 mAh, non-removable

Charging Fast charging 45W

USB Power Delivery 3.0

Fast Qi/PMA wireless charging 15W

Reverse wireless charging 4.5W

MISC Colors Aura Glow, Aura White, Aura Black, Aura Blue

Models SM-N975F, SM-N975U, SM-N9750, SM-N975U1, SM-N975W, SM-N975N, SM-N975X, SCV45

SAR 0.35 W/kg (head) 0.70 W/kg (body)

SAR EU 0.19 W/kg (head) 1.40 W/kg (body)

Price $ 409.99 / € 799.00 / £ 589.70 / Rp 12,999,000

TESTS Performance AnTuTu: 342208 (v7), 438622 (v8)

GeekBench: 10403 (v4.4), 2154 (v5.1)

GFXBench: 24fps (ES 3.1 onscreen)

Display Contrast ratio: infinite (nominal)

Camera Photo / Video

Loudspeaker -26.0 LUFS (Very good)

Audio quality Noise -94.0dB / Crosstalk -95.1dB

Battery life

Endurance rating 107h