

Samsung GALAXY S5



Enterprise-Class Mobile Security

Integrated device, application,
and data security for mobile
business users – powered by
Samsung KNOX Workspace





Worry-Free Security for Your Work and Life

There's no denying that mobile devices drive productivity. More and more, we rely on our devices for both work and life – they have become a central point for storing and accessing the professional and personal data we need in our daily routines. Safeguarding these information assets is critical inside and outside the workplace.

Along with lightning-fast download speeds, extended battery life, and high-quality imaging, the newly designed GALAXY S5 includes all the enhanced security capabilities needed to keep your business and personal information secure. Not only is security effective and easy to use, you can confidently meet or exceed the most stringent requirements for bring your own device (BYOD) or corporate owned, personally enabled (COPE) device programs.

Samsung GALAXY S5: Built-in, Enterprise-Class Security

	Base Protection	KNOX Workspace
Device Security: Protects lost or stolen devices	<ul style="list-style-type: none">- 500+ IT-configurable security policies- User-driven remote wipe and reactivation lock	<ul style="list-style-type: none">- Two-factor authentication
Application Security: Prevents unauthorized access		<ul style="list-style-type: none">- KNOX Container- Security Enhancements (SE) for Android
Data Security: Restricts information to intended audience	<ul style="list-style-type: none">- Virtual Private Network (VPN) support- On-Device Encryption	<ul style="list-style-type: none">- TrustZone-protected security features (key storage and certificate management)
Malware Prevention: Blocks malware and hackers		<ul style="list-style-type: none">- TrustZone-based Integrity Measurement Architecture (TIMA)- Trusted Boot- Secure Boot

Built-in Security Works Anywhere, All the Time

Let’s face it: One of the most problematic security issues with mobile devices is portability. Devices can easily be left behind at an airport or stolen from a hotel room. The GALAXY S5 gives you and your IT department the tools to keep data safe – even if the device isn’t in your possession.

With more than 500 device policies that IT can use to control application, system, hardware, and password security, the GALAXY S5 can block unauthorized users from accessing business data if it is lost or stolen. One of these critical policies, available through KNOX Workspace, is to require two-factor authentication – like a fingerprint and a passcode – for connecting your GALAXY S5 to business resources.

Even better – you have direct control over the security of your GALAXY S5 in case it is lost or stolen. You can:

- Locate or remotely wipe your GALAXY S5 device with the Samsung Find My Mobile website.
- Use Private Mode to lock or hide your personal content behind the fingerprint scanner.
- Set the GALAXY S5’s Reactivation Lock to prevent malicious users from reactivating or resetting your device – all features remain inaccessible until you enter your Samsung account credentials.

Enterprise-Ready Certifications

Whether business or personal information is at stake, Samsung GALAXY S5 offers comprehensive, enterprise-class security that keeps you secure and productive anywhere you go. Years of research and engineering have culminated in a sophisticated, secure mobile platform that is relied upon by some of the most strictly regulated private sector industries and highly secure government agencies. Samsung KNOX Workspace, the core of the GALAXY S5 built-in security, has extensive, internationally-recognized security certifications to provide a mobile platform you can trust to help you work securely.

Federal Information Processing Standard (FIPS) 140-2 Level 1 Certification

Issued by the National Institute of Standards and Technology

DISA Mobile Operating System Security Requirements Guide Compliance

Issued by the Defense Information Systems Agency

Common Criteria for Information Technology Security Evaluation

Issued by the National Information Assurance Partnership

End User Devices (EUD) Security Guidance

Issued by the Communications and Electronics Security Group (CESG)

500+ security policies

Two-factor authentication

Remote wipe

Reactivation lock

Protects Mobile Business Applications

Whether a standard enterprise email package or custom in-house development, mobile applications can put critical corporate data and resources at risk if accessed by unauthorized users. Striking a balance between security and user productivity, the GALAXY S5 insulates applications by keeping business and personal workspaces separate using the KNOX Container.

Enterprise IT administrators can control which applications reside in the KNOX Container and set policies for whether or not those applications can share data outside of that container. Your calendar, for example, may be allowed to share information between business and personal interfaces, but your corporate email would not. As an added safety measure, the container requires two-factor biometric authentication methods – like a fingerprint and passcode.

The KNOX Workspace also protects applications on the GALAXY S5 with Security Enhancements for Android. With this feature, the GALAXY S5 offers superior security over native Android devices – increasing the number of controlled security domains from four to more than 100. Mandatory access controls are required for each domain, and applications are only given the minimal permissions needed to operate. If any domain is compromised, the damage is contained in one area and other areas are left unaffected.

- KNOX Container
- SE for Android

Keeps Business Data Safe

Making sure corporate data does not fall into the wrong hands is one of those worries that keeps IT administrators up at night. With the GALAXY S5, businesses can lock down corporate data – regardless of when or where it is being accessed. Some of the KNOX Workspace features already mentioned – like containers and two-factor authentication – play a critical role in providing this comprehensive security.

There are, however, additional layers of protection built into the GALAXY S5 to further protect data assets, including certificate-based authentication. When using certificates, no username or password is stored on the device, meaning no one can use a lost or stolen device to breach your corporate network. The GALAXY S5 stores certificate keys in the TrustZone – a secure area of your device hardware – that functions like a mobile vault, making it impossible for keys to be removed from the device by unauthorized users.

On-Device Encryption further strengthens the full-device encryption capabilities already built into the GALAXY S5’s Android platform. This added encryption feature verifies that the Android operating system has not been compromised before it decrypts any data that might be exposed to unauthorized users. At the same time, the GALAXY S5 provides broad compatibility with many VPN solutions, covering all levels of VPN security – IPsec, L2TP, PPTP, and SSL included. This VPN support means you can securely connect to your corporate network. Data won’t be compromised in transit between your device and corporate resources.

- TrustZone-protected security features
 - On-Device Encryption
 - SSL VPN support



Android Stack	Key Enhancements in KNOX Workspace	
Application Layer	KNOX Container	<div>-Two-factor authentication for container access</div> <div>-Third-party container support</div> <div>-TrustZone-protected security features (Key storage/Certificate management/ODE)</div> <div>-Real-time integrity monitor</div>
Android Framework	KNOX Android Framework	
Android Operating System	Security Enhancements for Android	
Linux Kernel	TIMA	
Boot Loader	Trusted Boot	
	Secure Boot	
	HardwareTrustZone	

Blocks Malware and Hacker Attacks

The increased surface area that mobile devices create makes a tempting target for hackers, and the potential for malware-based attacks only adds to the already significant challenge IT faces when trying to keep their users and company resources safe. If either of these threats access and modify the Android operating system, your whole device becomes vulnerable to data leakage – posing a serious threat to your business and personal data.

The GALAXY S5 eliminates the risk of malicious attacks that could compromise data by enforcing the integrity of your device operating system at all times. KNOX Workspace includes a TrustZone-based Integrity Measurement Architecture (TIMA) that immediately identifies any attempts to modify the Android operating system or security functions in the TrustZone. If a device is compromised, IT has the option to trigger security recovery policies, including automatically wiping the contents of the secure application container or blocking the device from accessing the corporate network.

Similarly, the GALAXY S5 can detect any attempt to insert rogue boot processes during startup. Secure Boot and Trusted Boot, features of the KNOX Workspace, allow only verified processes to be loaded in a valid, trusted sequence. Anything else that tries to run during startup will immediately terminate the boot process. The Android operating system is also verified at startup, with any evidence of tampering permanently logged.

TIMA

Trusted Boot

Secure Boot

Samsung GALAXY S5 Specs

Network
4G Cat.4 (150/50Mbps)

AP
4G: 2.5GHz Quad core application processor

Display
5.1” FHD Super AMOLED (1920 x 1080), 432 ppi

Dimension
142.0 x 72.5 x 8.1mm, 145g

OS
Android 4.4.2 (Kitkat)

Memory
RAM : 2GB
16/32GB User Memory + microSD slot
(up to 128GB)

Connectivity
Wi-Fi : 802.11 a/b/g/n/ac HT80, MIMO(2x2)
Download Booster
(4G + Wi-Fi simultaneous reception)
NFC, Bluetooth®: 4.0 BLE / ANT+
USB 3.0
IR Remote

Additional Features
IP67 certificated Dust & Water Resistant*,
Emergency Mode, Ultra Power Saving Mode,
S Health, Quick Connect, Private Mode, Kids Mode

*Samsung GALAXY S5 provides ingress protection against dust and water to a maximum of 1 meter for up to 30 minutes, allowing it to be certified to an IP67 rating. The back cover and USB port must be correctly sealed to protect against dust and water ingress.

Camera
Main (Rear) : 16MP (1/2.6”, Phase Detection AF)
Sub (Front) : 2.0MP (1920 x 1080, Wide-angle lens)

Camera Features
HDR (Rich tone), Selective Focus, Virtual Tour Shot

Video
UHD@30fps, HDR, video stabilization
Video Codec : H.263, H.264(AVC), MPEG4, VC-1,
Sorenson Spark, MP43, WMV7, WMV8, VP8
Video Format : MP4, M4V, 3GP, 3G2, WMV, ASF, AVI,
FLV, MKV, WEBM

Audio
Audio Codec : MP3, AMR-NB/WB, AAC/ AAC+/
eAAC+, WMA, Vorbis, FLAC
Audio Format : MP3, M4A, 3GA, AAC, OGG, OGA,
WAV, WMA, AMR, AWB, FLAC, MID, MIDI, XMF,
MXMF, IMY, RTTTL, RTX, OTA

Sensor
Accelerometer, Gyro, Proximity, Compass,
Barometer, Hall, RGB ambient light, Gesture,
Fingerprint, Heart Rate Monitor

Battery
2800mAh
Standby time : 390 hours (LTE)
Talk time: 21 hours (WCDMA)

Google Mobile Services*
Chrome, Drive, Photos, Gmail, Google, Google+,
Google Settings, Hangouts, Maps, Play Books,
Play Games, Play Newsstand, Play Movie & TV,
Play Music, Play Store, Voice Search, YouTube

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WORK SECURED

Constantly evolving mobile security with Samsung KNOX : Experience a more secure work environment and enhanced business performance.

Secured by Samsung **KNOX**

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