

SONY®

White paper

May 2012



XPERIA go
ST27i/ST27a

Purpose of this document

Sony Mobile Communications product White papers are intended to give an overview of a product and provide details in relevant areas of technology.

Document history

Version

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Sony Mobile Developer World

For the latest Sony Mobile Communications technical documentation and development tools, go to

<http://developer.sonymobile.com/wp/>.

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Product overview

Xperia™ go – Made to withstand your everyday life

Sleek, stylish and with extra durability, Xperia™ go is the perfect entertainer. Enjoy millions of songs and all your favourite films. Shoot shots fast, or film your friends in sharp HD. Busy cooking? Walking in the rain? Relaxing on the beach? Use Xperia™ go, even when your fingers are wet. Then share everything instantly, or show it all on your TV at home. Stylish just got incredibly strong.

Designed to outperform

Get the best out of your entertainment on the razor sharp 3.5" Reality Display with Mobile BRAVIA® Engine. Your favourite content, the latest shows from Video Unlimited, millions of tracks from Music Unlimited. All on a slick smartphone that's just 9.8 mm thin. It's incredibly powerful too. With the dual core 1 GHz processor you browse, stream and download what you like in an instant.

Turn friends into film stars

Seen that scene? Grab it super quick with the 5 megapixel camera. From sleep to snap in just over a second. Or make life come to life, in razor-sharp high definition video. Finished shooting? Post everything on your favourite social site, or share it on your TV using DLNA®.

Watch it all on any screen

Big audience? Treat them to a show on the big screen. Or make your music scream out loud. Xperia™ go is DLNA® enabled. So you can share all your stills, videos, web links and music with any DLNA enabled device via Wi-Fi®, like a BRAVIA® HDTV, home theatre system, Sony Tablet or Vaio® laptop.

Extra durability

With the highest level of dust and water resistance available on any smartphone, Xperia™ go is designed to take what life throws at it. Getting soaked outside? Use GPS Navigation to find that restaurant on the scratch resistant display, then call a taxi, even with wet fingers. Into sports? Compete, then share your stats with the miCoach™ app, or get fit and artistic with FigureRunning™.

Sony Entertainment Network*. Your ultimate source for digital entertainment

Feasts for film fans, masses of music. Enjoy millions** of songs from Music Unlimited. Or download your favourite hit movies from Video Unlimited. It's all on Sony Entertainment Network. No trips to the store. No late fees. Just pure entertainment.

The best tracks from Music Unlimited. The latest movies from Video Unlimited – enjoy everything with one account. It's the perfect fit for a life full of entertainment.



* Video Unlimited and Music Unlimited are not available in every market.

** The number of tracks available from the Music Unlimited service can vary by country.

Signature features

Xperia™ go comes with a range of Xperia™ features as standard. Below is a summary of the key signature features.

Xperia™ Timescape™

Communication made easy

The Timescape™ application manages all your communication with one person in one place. You can effortlessly browse by category your Facebook™, Twitter™, email and text communications, as well as view your photos. Now everything is all together and in chronological order, so you don't have to open different applications to see what's going on.

Xperia™ Infinite button

Everything you want – from everywhere

Tap the infinite button in the Timescape™ application and smart filter each category of communication by person. For example, when viewing a text message from a friend in Timescape™, tap the infinite button to view a list of all chat messages with that friend.

Xperia™ Local connectivity

More control over your media

Using Xperia™ Local connectivity, you can exercise more control over how media files get transferred and stored. For example, you can select MTP mode to transfer files if you want to limit the risk of data corruption or select MSC mode if you want to have more control over the data storage.

Xperia™ Home screen application

The place you call Home

Customise your Home screen with widgets, shortcuts, folders, themes, wallpaper and other items. Where's best for you? Email top right? Music player bottom left? You decide. With four extensions to your Home screen, you've got plenty of space to put things where you want. Just remember to flick left or right to find them.

Facts – dimensions, weight, performance and networks*

Operating system	Google™ Android™ 2.3 (Gingerbread)
Processor	1 GHz NovaThor™ U8500 Dual-core Cortex A9
GPU	ARM Mali-400
Size	111 x 60.3 x 9.8 mm
Weight	110 grams
Available colours	Black, White
Main screen	
Colours	16,777,216 colour TFT
Resolution	480x320 pixels
Size (diagonal)	3.5 inches
Scratch-resistant	Yes – anti-reflection coating on mineral glass
Input mechanisms	
Text input	On-screen QWERTY keyboard
Touch screen	Capacitive (multi-touch), with Wet finger tracking
Touch gesture	Yes – multi-touch, up to 4 fingers supported
Handwriting recognition	Yes – for Simplified Chinese and Traditional Chinese only
Memory	
Internal phone storage	8 GB (up to 4 GB user-accessible memory)
RAM	512 MB
Flash memory	8 GB eMMC
Expansion slot	microSD™, up to 32 GB
Camera	
Camera resolution	5 MP
Digital zoom	16x
Photo flash	Yes – LED
Video recording	Yes – HD 720p
Sensors	
Accelerometer	Yes
Proximity sensor	Yes
Ambient light sensor	Yes







Magnetometer	Yes
Networks	
ST27a	UMTS HSPA 850 (Band V), 1900 (Band II), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
ST27i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
Data transfer speeds	
GSM GPRS	Up to 107 kbps (download). Up to 85.6 kbps (upload)
GSM EDGE	Up to 296 kbps (download). Up to 236.8 kbps (upload)
UMTS HSPA cat 6 (upload)	Up to 5.76 Mbps
UMTS HSPA cat 10(download)	Up to 14.4 Mbps
Talk time (GSM)	Up to 6 hours and 30 minutes**
Standby time (GSM)	Up to 520 hours**
Talk time (UMTS)	Up to 5 hours and 30 minutes**
Standby time (UMTS)	Up to 460 hours**
Music listening time	Up to 45 hours
Video playback time	Up to 6 hours
Battery	1305 mAh (built-in), typical 1265 mAh, minimum




* All performance metrics are measured under laboratory conditions.

** Values are according to GSM Association Battery Life Measurement Technique as performed in controlled laboratory conditions. Actual time may vary.

NOTE: Battery performance may vary depending on network conditions and configurations, and phone usage.

Categorised feature list

 <p>Camera 3D Sweep panorama™ 5 megapixel camera 16x digital zoom 16x video zoom Auto focus Face detection Flash / Photo flash Flash / Photo light Flash / LED Geotagging HD video recording (720p) Red-eye reduction Self-timer Send to web Smile detection Sweep Multi Angle Sweep Panorama Touch capture Touch focus Video light Video recording Video stabiliser</p>	 <p>Music 3D surround sound Album art Bluetooth™ stereo (A2DP) Clear bass Clear stereo Music Player PlayNow™ service* SensMe™ TrackID™ music recognition* xLoud™ Experience</p>	 <p>Internet Google Play™ Bookmarks Google™ search* Google Voice™ Search* Google Maps™ for Mobile with Street view and Latitude™* NeoReader™ barcode scanner Pan & Zoom Web browser (WebKit™)</p>
 <p>Communication Call list Conference calls Facebook™ application* Facebook inside Xperia™ Google Talk™ application* Noise suppression Skype™ Speakerphone Twitter™ (with Timescape™ integration)* Xperia™ Timescape™</p>	 <p>Messaging Conversations Email Google Mail™* Handwriting recognition Instant messaging Multimedia messaging (MMS) Predictive text input Sound recorder Text messaging (SMS) Type & Send widget</p>	 <p>Design Auto rotation Fast Capture Gesture input Keyboard (on-screen, 12 key) Keyboard (on-screen, QWERTY) Live Wallpaper Picture wallpaper Reality Display with Mobile BRAVIA® Engine Screenshot capturing Touch screen Voice input Wet finger tracking</p>

 <p>Entertainment FigureRunning™ miCoach™ app Media browser Motion gaming Radio (FM radio with RDS) Sony Entertainment Network* Video streaming Video viewing Walk Mate YouTube™*</p>	 <p>Organiser 3D Album 3D Gallery Airplane mode Alarm clock Calculator Calendar Contacts Document readers E-Manual Infinite button OfficeSuite Pro Setup guide Stopwatch Timer Torch functionality</p>	 <p>Connectivity 3.5 mm audio jack (CTIA) aGPS* Bluetooth™ wireless technology DLNA Certified® Media Go™* Media Transfer Protocol support Micro USB support Modem Native USB tethering PC Companion Synchronisation via Facebook™* Synchronisation via Google™ Synchronisation with computer Synchronisation via Microsoft® Exchange ActiveSync® USB High speed 2.0 support USB mass storage USB Host Wi-Fi® Wi-Fi® Hotspot functionality Wisepilot™ turn-by-turn navigation*</p>
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* This service is not available in all markets.

Technologies in detail

NOTE: The information outlined below is general and levels of compliance to standards and specifications may vary between products and markets. For more information, contact Sony Developer World or your Sony contact person where applicable.

Device-to-device communications (local)

Bluetooth™ wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile v1.2 Audio/Video Remote Control Profile v1.0 Handsfree Profile v1.5 Headset Profile v1.1 Object Push Profile v1.1 Phonebook Access Profile v1.0
Core version and supported core features	3.0
Connectable devices	Products which support at least one of the profiles above.

More information:

<http://developer.sonymobile.com/wp/>

www.bluetooth.com

Wi-Fi®

Supported standards	IEEE 802.11b/g/n and Wi-Fi®
Connectable devices	Wi-Fi® access points
Frequency band	2.4 GHz
Data transfer rate	Up to 72 Mbit/s
Security	WEP 64 bit WEP 128 bit TKIP CCMP (AES) Open Authentication Shared Authentication EAP-SIM EAP-TLS EAP-TTLS/MSCHAPv2 PEAPv0/EAP-MSCHAPv2 PEAPv1/EAP-GTC WPA Personal and WPA2 Personal WPA Enterprise and WPA2 Enterprise
Encryption	WEP, TKIP and AES
Power save	WMM-UAPSD QoS, WMM

DLNA Certified® (Digital Living Network Alliance Certified)

Supported Device Classes	<p>M-DMS – Mobile Digital Media Server Media Types: Image, Video and Music Summary: The digital media server exposes the media files in your phone to a Wi-Fi® network. The files can then be accessed from other DLNA Certified® clients.</p> <p>+PU+ Media Types: Image, Video and Music Summary: Play media saved in the phone on another device, such as a TV or computer, using 2-box push technology. The +PU+ feature is integrated into the Gallery and Music applications.</p> <p>M-DMP – Mobile Digital Media Player Media Types: Image, Video and Music Summary: Play content stored on another device, for example, a server or a PC, directly on the phone.</p>
Supported Bearers	Wi-Fi®
DRM Support	The Sony DLNA Certified® implementation does not support DRM-protected content.

Messaging

MMS (Multimedia Messaging Service)

According to OMA Multimedia Messaging Service v1.0 + SMIL

Email

Bearer type (IP)	GPRS, EGPRS, UMTS
Character sets	BIG5 Traditional Chinese GB18030 ISO-2022-JP Japanese ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO 8859-11 KOI8-R Cyrillic Shift_JIS Japanese USASCII UTF-16 UTF-8 Windows® 874 Windows® 1251 Cyrillic Windows® 1252 Windows® 1254 Turkish Windows® 1258 Vietnamese
Protocols	POP3 and IMAP4
Push email	Microsoft® Exchange ActiveSync® (EAS)
Secure email	SSL/TLS, both port methods (POPS/IMAPS) and START-TLS
HTML mail	Yes (read only)

More information:

<http://developer.sonymobile.com/wp/>

www.openmobilealliance.org

Positioning – location based services

Supported standards:

- OMA Secure User Plane Location (SUPL) v1.0
- 3GPP™ Control Plane location (including Emergency location)

Supported satellite systems:

GPS

Provisioning (OMA CP)

OMA CP version 1.1

Multimedia (audio, image and video)

Audio Playback	Decoder format	Supported in file format
	Audio decoding MPEG-1/2/2.5, audio layer 3	MP3 (.mp3)
	AAC, AAC+, eAAC+	3GPP (.3gp), MP4 (.mp4, .m4a)
	AMR-NB, AMR-WB	3GPP (.3gp)
	General MIDI (GM)	SMF (.mid)
	Linear PCM 16bit	WAV (.wav)
	OTA	OTA (.ota)
	Ogg vorbis	Ogg vorbis (.ogg)
Audio Recording	Encoder format	Supported in file format
	AMR-NB, AMR-WB	3GPP (.3gp), MP4 (.mp4), AMR (.amr)
	AMR-NB, AMR-WB, AAC-LC stereo Sample rate: 48 kHz Bit rate: 128 kbps	3GPP (.3gp), MP4 (.mp4)
Image Playback	Decoder format	Supported in file format
	1, 4, 8, 16, 24 and 32 bpp and RLE encoded formats	BMP (.bmp)
	Single and multi-frame, bitmap mask support (GIF87a format and GIF89a format)	GIF (.gif)
	Joint Photographic Experts Group	JPEG (.jpg)
	Portable Network Graphics Bitmap mask support	PNG (.png)
	Wireless Bitmap	WBMP (.wbmp)
Image Capture	Encoder format	Supported in file format
	Joint Photographic Experts Group	JPEG (.jpg)
Video Playback	Decoder format	Supported in file format
	MPEG-4 Visual Simple Profile Level 6, Advanced Simple Profile Level 5	3GPP (.3gp), MP4 (.mp4)
	H.264 High Profile Level 3.2	3GPP (.3gp), MP4 (.mp4)
	H.263 Profile 0, Level 70	3GPP (.3gp)
	Matroska	Matroska (.mkv)
	Xvid	AVI (.avi, .xvid)

Video Recording	Encoder format	Supported in file format
	Video H.263 Profile 0, H.264 Baseline Profile Audio: AAC-LC stereo, sample rate 48 kHz bit rate 128 kbps, AMR-NB	3GPP (.3gp), MP4 (.mp4)
Audio/Video Streaming	Streaming transport	RTSP according to 3GPP™ HTTP streaming
DRM	DRM (Digital Rights Management) – features the rights and copy protection of downloaded content	OMA DRM 1.0

Synchronisation (OMA DS, EAS, Google Sync™)

OMA Data Synchronisation protocol versions 1.1.2 and 1.2

OMA Data Formats: vCard 2.1, vCalendar 1.0

Microsoft® Exchange ActiveSync® protocol version 2.5

Microsoft® Exchange ActiveSync® protocol version 12

Microsoft® Exchange ActiveSync® protocol version 12.1

Google Sync™

Related information:

<http://developer.sonymobile.com/wp/>

Web browser

Browser version	Android 2.3 Browser (Based on WebKit™)
Navigation/rendering	Adobe™ Flash™ 11* Full page PC rendering Landscape/portrait rendering Pan & Zoom
Browser compliancy	CSS 2.0 CSS 2.1 CSS 3.0 DOM 2.0 DOM 3.0 HTML version 4.0 HTML version 5.0 JavaScript 1.7/ECMA-script 262 3rd edition WebGL 1.0 XHTML Basic version 1.0 XHTML 1.1
Supported Device API	Geo-location API
Protocol compliancy	Gzip HTTP/1.1 OMA Download 1.0 TLS 1.0 and SSL 3.0

Related information:

<http://developer.sonymobile.com/wp/>

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