

SONY®

# White paper

May 2012



XPERIA go  
ST27i/ST27a

# Purpose of this document

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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

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## Version

May 2012	First released version	Version 1
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# Sony Mobile Developer World

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

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

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# Table of contents

<b>Product overview .....</b>	<b>2</b>
Xperia™ go – Made to withstand your everyday life .....	2
Signature features .....	4
Facts – dimensions, weight, performance and networks .....	5
Categorised feature list .....	7
<b>Technologies in detail .....</b>	<b>9</b>
Device-to-device communications (local) .....	9
Bluetooth™ wireless technology .....	9
Wi-Fi® .....	10
DLNA Certified® (Digital Living Network Alliance Certified) .....	11
Messaging .....	12
MMS (Multimedia Messaging Service).....	12
Email .....	12
Positioning – location based services .....	13
Provisioning (OMA CP) .....	13
Multimedia (audio, image and video) .....	14
Synchronisation (OMA DS, EAS, Google Sync™) .....	15
Web browser .....	16
Trademarks and acknowledgements .....	17

# Product overview

## **Xperia™ go – Made to withstand your everyday life**

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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

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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\*

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<b>Operating system</b>	Google™ Android™ 2.3 (Gingerbread)
<b>Processor</b>	1 GHz NovaThor™ U8500 Dual-core Cortex A9
<b>GPU</b>	ARM Mali-400
<b>Size</b>	111 x 60.3 x 9.8 mm
<b>Weight</b>	110 grams
<b>Available colours</b>	Black, White
<b>Main screen</b>	
Colours	16,777,216 colour TFT
Resolution	480x320 pixels
Size (diagonal)	3.5 inches
Scratch-resistant	Yes – anti-reflection coating on mineral glass
<b>Input mechanisms</b>	
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
<b>Memory</b>	
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
<b>Camera</b>	
Camera resolution	5 MP
Digital zoom	16x
Photo flash	Yes – LED
Video recording	Yes – HD 720p
<b>Sensors</b>	
Accelerometer	Yes
Proximity sensor	Yes
Ambient light sensor	Yes

Magnetometer	Yes
<b>Networks</b>	
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
<b>Data transfer speeds</b>	
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
<b>Talk time (GSM)</b>	Up to 6 hours and 30 minutes**
<b>Standby time (GSM)</b>	Up to 520 hours**
<b>Talk time (UMTS)</b>	Up to 5 hours and 30 minutes**
<b>Standby time (UMTS)</b>	Up to 460 hours**
<b>Music listening time</b>	Up to 45 hours
<b>Video playback time</b>	Up to 6 hours
<b>Battery</b>	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><b>Camera</b>            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><b>Music</b>            3D surround sound            Album art            Bluetooth™ stereo (A2DP)            Clear bass            Clear stereo            Music Player            PlayNow™ service*            SensMe™            TrackID™ music recognition*            xLoud™ Experience</p>	 <p><b>Internet</b>            Google Play™            Bookmarks            Google™ search*            Google Voice™ Search*            Google Maps™ for Mobile with Street view and Latitude™*            NeoReader™ barcode scanner            Pan &amp; Zoom            Web browser (WebKit™)</p>
 <p><b>Communication</b>            Call list            Conference calls            Facebook™ application*            Facebook inside Xperia™            Google Talk™ application*            Noise suppression            Skype™            Speakerphone            Twitter™ (with Timescape™ integration)*            Xperia™ Timescape™</p>	 <p><b>Messaging</b>            Conversations            Email            Google Mail™*            Handwriting recognition            Instant messaging            Multimedia messaging (MMS)            Predictive text input            Sound recorder            Text messaging (SMS)            Type &amp; Send widget</p>	 <p><b>Design</b>            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><b>Entertainment</b>            FigureRunning™            miCoach™ app            Media browser            Motion gaming            Radio (FM radio with RDS)            Sony Entertainment Network*            Video streaming            Video viewing            Walk Mate            YouTube™*</p>	 <p><b>Organiser</b>            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><b>Connectivity</b>            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)

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### 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](http://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><b>M-DMS – Mobile Digital Media Server</b>  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><b>+PU+</b>  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><b>M-DMP – Mobile Digital Media Player</b>  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

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### 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](http://www.openmobilealliance.org)

## **Positioning – location based services**

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Supported standards:

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

Supported satellite systems:

GPS

## **Provisioning (OMA CP)**

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OMA CP version 1.1

## Multimedia (audio, image and video)

<b>Audio Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	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)
<b>Audio Recording</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	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)
<b>Image Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	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)
<b>Image Capture</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	Joint Photographic Experts Group	JPEG (.jpg)
<b>Video Playback</b>	<b>Decoder format</b>	<b>Supported in file format</b>
	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)



<b>Video Recording</b>	<b>Encoder format</b>	<b>Supported in file format</b>
	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)
<b>Audio/Video Streaming</b>	Streaming transport	RTSP according to 3GPP™ HTTP streaming
<b>DRM</b>	DRM (Digital Rights Management) – features the rights and copy protection of downloaded content	OMA DRM 1.0

## **Synchronisation (OMA DS, EAS, Google Sync™)**

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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

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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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