Xperia™ sola

MT27i

XPERIA

SONY®

make.believe

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		
March 2012	First released version	Version 1

Sony Developer World

For the latest Sony Mobile Communications technical documentation and development tools, go to *www.sonymobile.com/developer.*

Table of contents

Product overview

Xperia™ sola – Get entertained with a sense of magic

Watch anything you want, anywhere you like. Highlight web links without touching the screen with floating touch™. Just like magic. Or click on a flick from Video Unlimited for blockbuster movies in super-high quality on the razor sharp Reality Display. Time for change? Touch a SmartTag and all your settings are fine tuned to where you are: car, home, office. Seen a scene? Capture it in the blink of a lens with the 5 MP HD camera. Life in a snap you might say.

Add the magic touch. Without the touch
Experience web magic. Browse through the sport, the gossip or the best clips without even touching the screen. With floating touch™ you just move your finger over links and they highlight. Find that show-off site, touch it to open, and enjoy. You'll never open the wrong link by accident again.

Simplify your everyday with SmartTags
Touch your home Xperia™ SmartTag to turn on Wi-Fi™. Launch news & weather app. Or turn phone sound on. Bedtime? Touch the bedroom Xperia™ SmartTag to mute your phone. Turn on its alarm. Or turn off Wi-Fi™. With ready-to-go profiles for home, office, car and bedroom, and the choice to set the options you want with LiveWare manager, it's so easy to use SmartTags wherever you are. Or simply share your pictures with other NFC enabled smartphones.

Watch the show – on the go
Pick the latest Hollywood blockbuster from Video Unlimited and download it via Wi-Fi®, then start the show on the bus. Take in a takeaway as you watch the action in true bright colours from the razor sharp 3.7" Reality Display with Mobile BRAVIA Engine. Add crystal clear tones with 3D surround sound audio through your headphones and you'll feel part of the picture.

Snap your shots in a second
Why miss the unmissable? Xperia™ sola's 5 megapixel camera goes from sleep to snap in the blink of an eye. Just over a second actually. So you can keep the magic from the moment, then share it super-quick on Facebook™, Twitter™ or any screen using DLNA®. On holiday? You're always on location. When the action starts to roll, shoot it in HD video. In fact you get everything faster with the dual core 1 GHz processor.

Sony Entertainment Network[1]. Your ultimate source for digital entertainment

Feasts for film fans, masses of music. Enjoy millions[2] 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.

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1. Video Unlimited and Music Unlimited are not available in every market.
2. The number of tracks available varies by country.

Signature features

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

Xperia™ Timescape™
The place to meet your friends
The Timescape™ application manages all your communication with one person in one place. You can effortlessly browse by category your Facebook™, Twitter™, 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[1]

Operating system	Google™ Android™ 2.3 (Gingerbread)
Processor	1 GHz STE U8500 Dual Core
GPU	DB8500
Size	116 x 59 x 9.9 mm
Weight	107 grams
Available colours	Black, White, Red
Main screen	
Colours	16,000,000 colour TFT
Resolution	854x480 pixels
Size (diagonal)	3.7 inches
Scratch-resistant	Yes – hard coated shatterproof sheet on scratch-resistant glass
Input mechanisms	
Text input	On-screen QWERTY keyboard
Touch screen	Capacitive
Touch gesture	Yes – multi-touch, up to 4 fingers supported
floating touch™	Yes
Memory	
Internal phone storage	8 GB (up to 5 GB user-accessible memory)
RAM	512 MB
SD card	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

1.Performance metrics measured under laboratory conditions

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Ambient light sensor	Yes
Magnetometer	Yes
Networks	
MT27i	Quad EDGE/GSM/GPRS 850, 900, 1800, 1900 W-CDMA Band I, II, V and VIII
Data transfer speeds	
GSM GPRS	Up to 100 kbps (download). Up to 80 kbps (upload)
GSM EDGE	Up to 296 kbps (download). Up to 236.8 kbps (upload)
UMTS HSPA cat 6 (upload)	Up to 5.6 Mbps
UMTS HSPA cat 10(download)	Up to 14.4 Mbps
Talk time (GSM)	Up to 6 hours*
Standby time (GSM)	Up to 470 hours*
Talk time (UMTS)	Up to 5 hours*
Standby time (UMTS)	Up to 475 hours*
Music listening time	Up to 40 hours
Video playback time	Up to 6 hours
Battery	1320 mAh (built-in), typical 1265 mAh, minimum

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

Camera
3D Sweep Panorama™
5 megapixel camera
16x digital zoom
Auto focus
Face detection
Flash/Photo flash
Geotagging
HD video recording (720p)
Red-eye reduction
Self-timer
Send to web
Smile detection
Video light
Video recording

Music
3D surround sound
Album art
Bluetooth™ stereo (A2DP)
Clear bass
Clear stereo
Music Player
PlayNow™ service*
SensMe™
TrackID™ music recognition*
xLoud™ Experience

Internet
Android Market™
Bookmarks
floating touch™
Google™ search*
Google Voice™ Search*
Google Maps™ for Mobile with
Street view and Latitude™*
NeoReader™ barcode scanner
Pan & zoom
Web browser (WebKit™)

Communication
2 speakerphones
Call list
Conference calls
Facebook™ application*
Facebook inside Xperia™
Google Talk™ application*
Noise suppression
Twitter™ (with Timescape™
integration)*
Xperia™ Timescape™

Messaging
Conversations
Email
Google Mail™*
Instant messaging
Multimedia messaging (MMS)
Predictive text input
Sound recorder
Text messaging (SMS)

Design
Auto rotation
Gesture input
Keyboard (on-screen, QWERTY)
Live Wallpaper
Picture wallpaper
Reality Display with
Mobile BRAVIA® Engine
Screenshot capturing
Touch screen
Voice input

Entertainment
3D Album
Accelerated Adobe Flash Video
Media browser
Motion gaming
Radio (FM radio with RDS)
Sony Entertainment Network*
Video streaming
YouTube™*

Organiser
Airplane mode
Alarm clock
Calculator
Calendar
Contacts
Document readers
Notes
Setup guide
Stopwatch
Tasks
Timer

Connectivity
3.5 mm audio jack (CTIA)
aGPS*
Bluetooth™ wireless technology
DLNA Certified®
Micro USB support
Media Go™*
Media Transfer Protocol support
Modem
Native USB tethering
NFC
PC Companion
Synchronisation via Microsoft®
Exchange ActiveSync®
USB High speed 2.0 support
USB Host
Wi-Fi®
Wi-Fi® Hotspot functionality
Wisepilot™ turn-by-turn naviga-
tion*

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	Advanced Audio 2.1 + EDR
Connectable devices	Products which support at least one of the profiles above.

More information:

www.sonymobile.com/developer

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	**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. **+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 feature +PU+ is integrated in Gallery application and Music application. **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.
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:

www.sonymobile.com/developer

www.openmobilealliance.org

Positioning – location based services

Supported standards:

- OMA Secure User Plane Location (SUPL) v2.0

- 3GPP™ Control Plane location (incl. 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)

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:

www.sonymobile.com/developer

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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
Search	Internet Search
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

* *Updates are distributed via Android market™.*

Related information:

www.sonymobile.com/developer

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