

XPERIA™
X10

White paper
X10i, X10a

November 2009

Sony Ericsson
make.believe

Purpose of this document

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

Document history

Version

November 2009	First released version	Revision 1
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Sony Ericsson Developer World

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This White paper is published by:

Sony Ericsson Mobile Communications AB,
SE-221 88 Lund, Sweden

www.sonyericsson.com

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First revision (November 2009)
Publication number: 1234-3441

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Product overview

Everyone. Everywhere. Right where you want them.

Love having your friends close? Don't let distance keep you apart. Pull out the Xperia™ X10 and weave your social web, any time, any place with the Sony Ericsson Timescape™ application. One window for Facebook™, Twitter™, messages and all your friends. Lots of friends? One press of the infinite button and you'll see everything that's been going on with each person.

The new stage for showbiz

Bored? Add horror to your rock, enjoy an epic or see stars — all from one spot. Sony Ericsson Mediascape tells you what's happening in the highlife with all your music, videos and photos in one place, just waiting to be enjoyed. Hungry for more? Press the infinite button and the fun continues.

Never forget a face

The Xperia™ X10 recognizes up to five faces in any photo and automatically stores them under your friends in your phone, so you can post them on your page, or simply show them off. Who says image isn't everything?

Open for the future

Whether you want to work out, go out, or just chill out, you can download any application you want direct from Android™ Market. Tired of what's inside? Just customize the X10 to make it uniquely yours. And that's just the start. Every new update downloads right to your phone, making it better all the time. So you'll have a hard time trying to rate when it's out of date.



Facts – dimensions, weight, performance and networks

Operating system	Google™ Android™ Donut version 1.6
Processor	1 GHz Qualcomm Snapdragon™ QSD8250
Size	119 x 63 x 13 mm
Weight	135 grams
Available colours	Sensuous Black Luster White
Main screen	
Colours	65,536-colour TFT
Resolution	480x854 pixels
Size (diagonal)	4.0 inches
Scratch-resistant	Yes. Shutter proof sheet on mineral glass
Memory	
Phone memory	1 GB internal Up to 16 GB external
Memory card support	SanDisk microSD™/Transflash™ supports up to 16 GB
Networks	
Variant 1	UMTS HSPA 900, 1700, 2100 GSM GPRS/EDGE 850, 900, 1800, 1900
Variant 2	UMTS HSPA 800, 850, 1900, 2100 GSM GPRS/EDGE 850, 900, 1800, 1900
Data transfer speeds	
GSM GPRS	Up to 85.6 kbps
GSM EDGE	Up to 236.8 kbps
UMTS HSPA (upload)	Up to 2.0 Mbps (uplink, Cat 5)
UMTS HSPA (download)	Up to 7.2 Mbps (downlink, Cat 8)
Talk time (GSM)	Up to TBD hours according to GSM Association Battery Life Measurement Technique
Standby time (GSM)	Up to TBD hours according to GSM Association Battery Life Measurement Technique

Talk time (UMTS)	Up to TBD hours according to GSM Association Battery Life Measurement Technique
Standby time (UMTS)	Up to TBD hours according to GSM Association Battery Life Measurement Technique

Application overview list

Sony Ericsson signature applications

Sony Ericsson Timescape™
Sony Ericsson Mediascape
Sony Ericsson Home application
8.1 megapixel camera with Face recognition
Contacts with dialer, Call log, Favorites

Sony Ericsson services

PlayNow™ arena*
TrackID™
Sony Ericsson Sync

Open Handset Alliance™ applications

Alarm clock
Browser
Calculator
Calendar
Email
Messaging

Google applications

Android Market™ Client
Gmail™
Google Calendar™
Google Maps™ with Street View
Google Media Uploader
Google Phone-top Search
Google Search widget
Google Talk™
Google Voice Search™
YouTube™

Other applications

Moxier™ Sync Application set
Microsoft® Office Viewer
Quadrapop game
Wisepilot™ turn-by-turn navigation (free trial version)*

**The service is not available in all markets.*

Full feature list

1. Signature features

Sony Ericsson Timescape™

The place to meet your friends

The Timescape™ application manages all your communication with one person in one place. Browse through your conversations the bright way to check out your Facebook™, MySpace™, Twitter™, photos, emails, and texts. Now they're all kept together so you don't have to open loads of different applications to see what's going on.

Sony Ericsson Mediascape

Now that's entertainment

Mediascape is the smart way to get all the music, photos and videos you want from your favourite friends and artists. It accesses content from everywhere – your phone, YouTube™, PlayNow™ applications* – and presents everything for you.

Infinite button

Everything you want – from everywhere

Find out all about your friends in a flash. Press the infinite button in the Timescape™ application and smart filter everything that's going on with each person. In Mediascape the infinite button presents all the information you want about your favourite celebrities and artists.

8.1 megapixel camera with Face recognition

Detects up to five faces in any photo.










Sony Ericsson Home

Contacts with dialer, Call log, Favorites



**PlayNow™ services are not available in all markets.*

2. Categorized features

 <p>Camera 8.1 megapixel camera Up to 16x digital zoom Auto focus Face recognition Geo tagging Image and video stabilizer Photo and video light Send to web (photo and video upload) Smile detection Video recording Scene detection Recent shot tray</p>	 <p>Music Album art Bluetooth™ stereo (A2DP) Media player Music tones (MP3/AAC) PlayNow™ TrackID™</p>	 <p>Web Bookmarks Pan & zoom Web search (from standby) Web feeds WebKit web browser HTML 4.01 XHTML 1.1</p>
 <p>Communication Call list Conference calls Polyphonic ringtones Sony Ericsson Timescape™ Speakerphone Vibrating alert Wisepilot™</p>	 <p>Messaging Conversational Messaging (SMS/MMS) Email Exchange ActiveSync® Picture messaging (MMS) Predictive text input Text messaging (SMS)</p>	 <p>Design Auto rotate Gesture control Picture wallpaper Touchscreen</p>
 <p>Entertainment 3D games Media browser Quadrapop game Sony Ericsson Mediascape Video streaming Video viewing</p>	 <p>Organiser Alarm clock Calculator Calendar Email Flight mode Infinite button Office suite Phonebook with dialer Sony Ericsson Home with digital clock widget World clock</p>	 <p>Connectivity 3.5 mm audio jack A-GPS Bluetooth™ technology Micro USB connector Moxier™ sync application set SyncML™ 1.2 Synchronisation USB support vCard Wi-Fi™ (802.11 b/g)</p>

3. Google applications



Google

Android™ Market Client
Contact Sync
Gmail™
Google Calendar™
Google Maps™ with Street View
Google Media Uploader
Google Phone-top Search
Google Search widget
Google Talk™
Google Voice Search
Network Location Provider
Set-up Wizard
YouTube™

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 Ericsson Developer World or your Sony Ericsson contact person where applicable.

Device-to-device communications (local)

Bluetooth wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile Audio/Video Remote Control Profile Generic Access Profile Generic Object Exchange Profile Handsfree Profile Headset Profile Object Push Profile
Core version and supported core features	2.0+EDR
Connectable devices	All products supporting Bluetooth spec. 2.0 and at least one of the profiles above

More information:

www.sonyericsson.com/developer

www.bluetooth.com

Wi-Fi™

Wi-Fi™ is a popular wireless networking technology that uses radio waves to provide wireless high-speed Internet and network connections. Wi-Fi hotspots exist in an increasing number of locations e.g airports, hotels, cafés and bistros. Mobile phones that support Wi-Fi can facilitate high data transfer rates and lower calling costs.

Supported standards	Wi-Fi™ certified. When applicable, 802.11g is prioritized over 802.11b.
Connectable devices	Wi-Fi™ access points
Frequency band	2.4 GHz
Data transmission rate	54 Mbit/s
Security	Open Open WEP Shared WEP WPA Personal and WPA2 Personal
Encryption	TKIP and AES
Power save	WMM-UAPSD QoS, WMM

Messaging

MMS (Multimedia Messaging Service)

MMS 1.0 is supported.

Email

Bearer type (IP)	GPRS, EGPRS, UMTS
Character sets	USASCII UTF-8 UTF-7 UTF-16 ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO-2022-JP Japanese Shift_JIS Japanese BIG5 Traditional Chinese GB2312 Simplified Chinese KOI8-R Cyrillic 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.sonyericsson.com/developer

www.openmobilealliance.org

Positioning – location based services

Supported standards:

OMA Secure User Plane Location (SUPL) v1.0

3GPP™ Control Plane location (incl. Emergency location)

Qualcomm® GPSOneXtra

Multimedia

Audio & Video

Audio Playback	Decoder format Audio decoding MPEG-1/2/2.5, audio layer 3 AAC, AAC+, eAAC+ AMR-NB AMR-WB WMA version 2, 7, 8 WMA version 9 WMA Pro (profile M0a) General MIDI (GM) GML SP-MIDI DLS (Mobile DLS supported) Linear PCM iMelody RTTTL/RTX OTA Ogg vorbis	Supported in file format MP3 (.mp3) 3GPP (.3gp); MP4 (.mp4, .m4a) 3GPP (.3gp); AMR (.amr) 3GPP (.3gp); AMR (.amr) AMRWB (.awb) WMA (.wma, .asf) WMA (.wma, .asf) WMA (.wma, .asf) SMF (.mid) SMF (.mid) SMF (.mid); XMF (.xmf, .mxmf) XMF (.xmf) WAV (.wav) iMelody (.imy) RTTTL/RTX (.rtttl, .rtx) OTA (.ota) Ogg vorbis (.ogg) Note: All listed audio file formats are supported ringtone file formats
Video Playback	Decoder format MPEG-4 Visual Simple Profile H.264 Baseline Profile H.263 Profile 0 VC-1 (WMV9)	Supported in file format 3GPP (.3gp); MP4 (.mp4) 3GPP (.3gp); MP4 (.mp4) 3GPP (.3gp) WMV (.wmv, .asf)
Audio/Video Streaming	Streaming transport	RTSP according to 3GPP™
Video encoding	Encoder format MPEG-4 Visual Simple Profile AAC	Supported in file format MP4 (.mp4)
Audio encoding	Encoder format AMR-NB	Supported in file format AMR-NB (.amr)
DRM	DRM (Digital Rights Management) — features the rights and copy protection of downloaded content.	OMA DRM 1.0 OMA DRM 2.1 (partially)

Synchronisation (OMA DS, EAS)

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

Related information:

www.sonyericsson.com/developer

Web browser

Browser version	Android OHD Browser (WebKit version AppleWebKit/528.5+)
Navigation/rendering	Pan & Zoom* Landscape/portrait rendering* Full page PC rendering* * Adobe™ Flash™ is not supported.
Search	Internet Search Find on page
Browser compliancy	HTML version. 4.01 HTML version. 5.0 (partial support) XHTML Basic version 1.0 WML 1.1 CSS 2.1 ECMA-script 262 3rd edition HTTPXMLRequest AJAX DOM 2.0 SVG Tiny, version 1.2 (partial support)
Protocol compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0

Related information:

www.sonyericsson.com/developer

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