XPERIA™

X8
E15i, E15a

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		
June 2010	First released version	Version 1
July 2010	Second released version	Revision 1
September 2010	Third released version	Revision 2
November 2010	Fourth released version	Revision 3
March 2011	Fifth released version	Revision 4
March 2011	Sixth released version	Revision 5

Sony Ericsson Developer World

For the latest Sony Ericsson technical documentation and development tools, go to *www.sonyericsson.com/developer*

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Product overview

Xperia™ X8 – Jump into infinite entertainment

View the viral over a sports drink. Chat to your chums with your thumbs. Xperia™ X8 is Infinite entertainment. Always open. Always new. Get what you like. From any of the four corners you like in your home screen. Facebook™* with your forefinger. Videos by your little finger. Your favourite apps and bookmarks at hand. One hand actually. That's all you need.

It's show time
What makes you smile? Sharing moments with mates? 80s rap videos? Disco divas? Or football fantasies? Get the best experience from a phone. More superstars. More one-hit wonders. More games. More gossip. From YouTube™ and the PlayNow™ service*.

Timescape™ application. Life as it happens
Timescape™ brings you all the fun as it happens – or you make it happen. From friends, tweets, messages. All up to date. All in time order. Instant news is good news, isn't it?

What's on today?
Download widgets you want and apps for everything. From Android Market™. Enjoy mood music through the 3.5 mm headphone jack. Blockbuster movies on the 3 inch screen. Or simply enjoy life.

* This service is not available in all markets.

Facts – dimensions, weight, performance and networks

Operating system	Google™ Android™ 2.1 (Eclair)
Processor	600 MHz Qualcomm MSM7227
Size	99 x 54 x 15 mm
Weight	104 grams
Available colours	Aqua Blue/White Dark Blue/White Pink/White Silver/White White
Main screen	
Resolution	320x480 pixels (HVGA)
Size (diagonal)	3.0 inches
Scratch-resistant	Yes (Front with minimum pencil hardness 6H.)
Input mechanisms	
Touch screen	Capacitive (single touch)
Text input	Quick text, Onscreen QWERTY keyboard
Memory	
Phone memory	Up to 128 MB
Memory card support	microSD™, up to 32 GB
Memory card included	2 GB
Camera	
Camera resolution	3.2 megapixel
Video recording	Yes, MPEG4 (VGA)
Sensors	
Accelerometer	Yes
Proximity sensor	Yes
Networks	
E15i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
E15a	UMTS HSPA 850 (Band V), 1900 (Band II), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900

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Data transfer speeds	
GSM GPRS	Up to 85.6 kbps
GSM EDGE	Up to 236.8 kbps
UMTS HSPA cat 5 (upload)	Up to 2.0 Mbps (uplink, Cat 5)
UMTS HSPA cat 8 (download)	Up to 7.3 Mbps (downlink, Cat 8)
Talk time (GSM)	Up to 4 hours 45 min *
Standby time (GSM)	Up to 446 hours *
Talk time (UMTS)	Up to 5 hours 40 min *
Standby time (UMTS)	Up to 476 hours *
Music listening time	Up to 23 hours 40 min **
Video playback time	Up to 9 hours 20 min **
Battery	1200 mAh

According to GSM Association Battery Life Measurement Technique.

** *Battery performance may vary depending on network conditions and configuration, and phone usage.*

Application overview list

Sony Ericsson signature applications
Sony Ericsson Timescape™
Sony Ericsson Home application
Sony Ericsson Music player
Sony Ericsson Album application

Sony Ericsson services
PlayNow™ service **
TrackID™ application
Sony Ericsson Sync
FOTA Update Service (Firmware Over The Air)

Other applications
Facebook™ **
Wisepilot™ turn-by-turn navigation (free trial version) **
Microsoft® Exchange ActiveSync® support with Dataviz™ RoadSync™

*Applications in the Android Market™ vary widely in size, from less than 100 KB for small utilities to 3-4 MB for full games, music player applications, or other major offerings. The average file size, based on a representative selection of useful and fun applications, is about 1 MB. This mean that on average, more than 100 applications can be downloaded and used without any problems. You can use the Android Market™ application in the phone to delete and later reinstall infrequently used applications.

** 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™*, tweets 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.

Infinite button
Everything you want – from everywhere
Find out all about your friends in a flash. Press the infinite button in the phone book and smart filter everything that's going on with each person. In the Sony Ericsson Music player, the infinite button lets you explore more information about your favourite celebrities and artists.

Sony Ericsson Sync
Make your mobile life available on the web
Synchronise your phone data with Sony Ericsson Sync. Match your phone contacts with your contacts on Facebook™*. All your synchronised phone data is right at your fingertips – in your account on www.sonyericsson.com.

Sony Ericsson Home
Your home screen – just like home
Where's best for you? Email top right? Music player bottom left? You decide. Put your favourites in thumb's reach. Use the unique touchscreen interface to drag 'n drop the icons into the corners of your home screen. Messages. Calls. Web. Music. YouTube™. Your favourite apps from Android Market™ or the PlayNow™ service*. What you want, where you want.

The service is not available in all markets.

2. Categorised features

Camera
3.2 megapixel camera
Send to web
Video recording

Music
Album art
Bluetooth™ stereo (A2DP)
Music tones (MP3/AAC)
PlayNow™ service *
Sony Ericsson Music Player
TrackID™ music recognition
application

Internet
Android Market™ *
Bookmarks
Google™ search *
Google™ Voice Search **
Pan & zoom
Web browser (WebKit)

Communication
Call list
Conference calls
Facebook™ application
Google Talk™
Polyphonic ringtones
Sony Ericsson Timescape™
Speakerphone
Twitter™ (Timescape™ integra-
tion)
Vibrating alert

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

Design
Auto rotate
Keyboard (onscreen, QWERTY)
Picture wallpaper
Touchscreen

Applications in the Android Market™ vary widely in size, from less than 100 KB for small utilities to 3-4 MB for full games, music player applications, or other major offerings. The average file size, based on a representative selection of useful and fun applications, is about 1 MB. This mean that on average, more than 100 applications can be downloaded and used without any problems. You can use the Android Market™ application in the phone to delete and later reinstall infrequently used applications.

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

Entertainment
3D games
Radio (FM radio with RDS)
Video streaming
Video viewing
YouTube™ *

Organiser
Alarm clock
Calculator
Calendar
Flight mode
Infinite button
Notes
Phone book
Stopwatch
Timer

Connectivity
3.5 mm audio jack (AVP)
aGPS
Bluetooth™ technology
Google Latitude™*
Google Maps™ with Street View*
Synchronisation: Microsoft®
Exchange ActiveSync® via
RoadSync client
Synchronisation via Facebook™
Synchronisation via Google™
Sync
Synchronisation via Sony Erics-
son Sync
USB support
Wi-Fi™
Wisepilot™ turn-by-turn naviga-
tion*

The 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 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 ANT+ Audio/Video Remote Control Profile Generic Access Profile Handsfree Profile Headset Profile
Core version and supported core features	v2.0+EDR
Connectable devices	All products supporting at least Bluetooth spec. 1.2 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, for example, 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 Mbps
Security	Open Open WEP Shared WEP WPA Personal and WPA2 Personal
Encryption	TKIP and AES
Power save	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-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	Exchange ActiveSync® support with Dataviz™ RoadSync™
Secure email	SSL/TLS (STARTTLS) for POP3, IMAP4 and SMTP
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)

Multimedia

Audio & Video

Audio Playback	Decoder format Audio decoding MPEG-1/2/2.5, audio layer 3 AAC, AAC+, eAAC+ AMR-NB 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) 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	Supported in file format 3GPP (.3gp); MP4 (.mp4) 3GPP (.3gp); MP4 (.mp4) 3GPP (.3gp)
Audio/Video Streaming	Streaming transport	RTSP according to 3GPP™
Video encoding	Encoder format MPEG-4 Visual Simple Profile AMR-NB	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

Synchronisation (OMA DS)

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 2.1 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
Browser compliancy	HTML version. 4.01 HTML version. 5.0 (Canvas) XHTML Basic version 1.0 XHTML 1.1 CSS 2.1 ECMA-script 262 3rd edition HTTPXMLRequest AJAX DOM 2.0
Protocol compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 Gzip

Related information:

www.sonyericsson.com/developer

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