XPERIA™

Pureness

X5, X5i

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		
September 2009	First released version	Revision 1

Sony Ericsson Developer World

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

Table of contents

Product overview

Xperia™ Pureness phone – Purity redefined

Are you a leader or a follower? Ready to challenge communication trends? Then treat yourself to Xperia™ Pureness™. Its illuminated see-through glass screen is designed to be a part of you, taking inspiration from light and air.

Simple and stylish, quiet and discrete, the Pureness™ phone is created for doing natural things like talking, texting and organizing your life well. It silently screams change and inspires new forms of expression, inspiring you to continue exploring the unknown.

Xperia™ Services – pure pleasure
Pureness™ phone comes with first class Xperia™ Services tailored to your needs. That means there's always help at hand if you have a question about your phone.

Just call our dedicated support team and they will give you all the help you need, or swap the phone within 48 hours in most cases if you need to – wherever you are. And you can surf the dedicated website to find out about all the best tips and tricks.

Enjoy Xperia™ Pureness™. Better still, let it delight and surprise you.

Facts – dimensions, weight, performance and networks

Size	102 x 43 x 13 mm
Weight	70 grams
Available colours	Black
Screen	
Type	64 step monochrome TFT, transparent
Resolution	240x320 pixels
Size (diagonal)	1.8 inches
Scratch-resistant	Yes, hard coated
Memory	
Phone memory	Up to 88 MB (phone memory) + up to 2 GB (media memory)
Networks	
X5	UMTS HSPA 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
X5i	UMTS HSPA 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900 (Variant for China market)
Data transfer speeds	
GSM GPRS (Class 10 CS4)	Up to 80 kbps (download). Up to 40 kbps (upload)
GSM EDGE (Class 10 MCS9)	Up to 247 kbps (download). Up to 123 kbps (upload)
UMTS HSPA (Cat. 5 upload)	Up to 2.0 Mbps
UMTS HSPA (Cat. 8 download)	Up to 7.3 Mbps
Talk time (GSM)	Up to 7 hours 30 min
Standby time (GSM)	Up to 350 hours
Talk time (UMTS)	Up to 3 hours 30 min
Standby time (UMTS)	Up to 350 hours

Full feature list – categorised list of features

Music
Album art
Bluetooth™ stereo (A2DP)
MEGA BASS™
Music player
Music tones (MP3/AAC)
TrackID™ application

Web
Access NetFront™ Web browser
Bookmarks
Google™ search
Mouse pointer
Pan & zoom
HTML 4.01
XHTML 1.1

Communication
Call list
Polyphonic ringtones
Speakerphone
Vibrating alert

Messaging
Conversations
Email
Microsoft Exchange ActiveSync®
Picture messaging (MMS)
Predictive text input
Sound recorder
Text messaging (SMS)
Unified messaging

Design
Activity menu key
Light
Navigation key
Picture wallpaper
Wallpaper animation

Entertainment
FM radio
Java™
Video streaming
Video viewing

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

Connectivity
Bluetooth™ technology
Modem
Synchronisation
USB mass storage
USB support
USB High speed 2.0 support

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 Basic Imaging Profile Dial-up Networking Profile File Transfer Profile Generic Access Profile Generic Object Exchange Profile Handsfree Profile Headset Profile Object Push Profile Personal Area Networking Profile Phonebook Access Profile Serial Port Profile Synchronisation Profile SyncML™ OBEX binding
Core version and supported core features	2.1+EDR
Connectable devices	All products supporting Bluetooth spec. 1.1, or higher, and at least one of the profiles listed above

More information:

www.sonyericsson.com/developer

www.bluetooth.com

Java™

Java™ Platform, Micro Edition	JSR-75 PDA Optional Packages for J2ME™ JSR-82 Bluetooth Wireless Technology API JSR 118 MIDP 2.0 JSR-120 Wireless Messaging API JSR-205 Wireless Messaging API 2.0 JSR-135 Mobile Media API 1.1 JSR 139 CLDC 1.1 JSR-172 J2ME™ Web Services Specification JSR-177 Security and Trust Services API for J2ME™ JSR-180 SIP API for J2ME™ JSR-184 Mobile 3D Graphics API for J2ME™ JSR 185 Java™ Technology for the Wireless Industry JSR-211 Content Handler API JSR-226 SVG API for J2ME™ JSR-229 Payment API JSR-234 Advanced Multimedia Supplements JSR-238 Mobile Internationalization API JSR-239 OpenGL ES JSR-248 Mobile Services Architecture Nokia UI Extension API
Java™ 3D	Mascot Capsule Micro3D Version 3 JSR-239 OpenGL ES JSR-184 Mobile 3D Graphics API for J2ME™

Messaging

(MMS) Multimedia Messaging Service

According to OMA Multimedia Messaging Service v1.2 + SMIL

Email

Bearer type (IP)	GSM Data (IP) GPRS and HSCSD
Character sets	USASCII UTF-7 UTF-8 UTF-16 UTF-17LE UTF-16BE UCS-2 / ISO10646 UCS2 ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO-8859-10 Nordic ISO-8859-11 Thai ISO-8859-15 Western MR5 KOI8 GB18030 Simplified Chinese GB2312 Simplified Chinese BIG5 ISO2022JP Windows 1251 Cyrillic Windows 1252 Windows 1254 Turkish Windows 1255 Hebrew Windows 1258 Vietnamese Shift JIS **Note:** GB2312 is only available in Simplified Chinese variants, that is, Mainland China variants. BIG5 is only available in Traditional Chinese variants, that is, Hong Kong and Taiwan variants.
OTA provisioning solution	OMA Client Provisioning 1.1
Protocols	POP3, SMTP and IMAP4
Push email	IMAP IDLE (extension of IMAP4 Rev1), OMA Email Notification 1.0 and scheduled checking, Exchange ActiveSync® (EAS)
Secure email	SSL/TLS, both port methods (POPS/IMAPS) and START-TLS
HTML mail	Yes

More information: *www.sonyericsson.com/developer, www.openmobilealliance.org*

Provisioning (OMA CP, OMA DM)

OMA CP version 1.1

OMA DM version 1.2

Related information:

www.sonyericsson.com/developer

Synchronisation (OMA DS, EAS)

OMA Data Synchronisation protocol versions 1.1.2 and 1.2

OMA Data Formats: vCard 2.1, vCalendar 1.0, vBookmark 1.0, notes as text/plain

Microsoft Exchange ActiveSync® protocol version 2.5

Related information:

www.sonyericsson.com/developer

Multimedia (audio and video)

Audio Playback	**Decoder format** Audio decoding MPEG-1/2/2.5, audio layer 3 AAC, AAC+, eAAC+ AMR-NB AMR-WB AMR-WB+ WMA version 2,7,8: Class 1 WMA version 9: Level 3 WMA Pro (profile M0a) General MIDI (GM) GML SP-MIDI DLS (Mobile DLS supported) Linear/A-law/.-law PCM iMelody	**Supported in file format** MP3 (.mp3) 3GP (.3gp); AAC (.aac); MP4 (.mp4, .m4a) 3GP (.3gp); AMR (.amr) 3GP (.3gp); AMR (.amr) ; AMR-WB (.awb) 3GP (.3gp); AMR (.amr) ; AMR-WB (.awb) WMA (.wma) WMA (.wma) WMA (.wma) SMF (.mid) SMF (.mid) SMF (.mid); XMF (.xmf, .mxmf) XMF (.xmf) WAV (.wav) iMelody (.imy)
Audio Recording	**Encoder format** AMR-NB AAC-LC (only used for video recording)	**Supported in file format** AMR (.amr) MP4 (.m4a)
Video Playback	**Decoder format** MPEG-4 Visual Simple Profile H.264 Baseline Profile H.263 Profile 0 VC-1 (WMV9)	**Supported in file format** 3GP (.3gp); MP4 (.mp4) 3GP (.3gp); MP4 (.mp4) 3GP (.3gp) ASF (.asf, .wmv)
Audio/Video Streaming	Streaming transport	RTSP according to 3GPP™
DRM	DRM (Digital Rights Management) features the rights and copy protection of downloaded content.	OMA DRM 1.0, 2.0, 2.1 Microsoft DRM Janus

Web browser

Browser version	Access NetFront™ 3.5
Bookmarks	Folders and sorting supported
Bookmark export/import	Bookmarks can be sent and received using vBookmark format and Bluetooth™, SMS, MMS and email
Navigation/rendering	Pan & Zoom Landscape/portrait rendering Full page PC rendering
Search	Internet Search Find on page
Browser compliancy	HTML 5.0 Canvas HTML version 4.01 XHTML™ Basic version 1.0 XHTML™ version 1.1 XHTML™ Mobile Profile version 1.1 WML 1.3 CSS 2.1 WCSS Version 26-Oct-2001 ECMA-script 262 3rd edition ECMAScript Mobile Profile 1.0 HTTPXMLRequest AJAX DOM 2.0 SVG Tiny, version 1.2
Browser plugin	SVG-T Adobe™ Flash Lite™ Audio/Video
Protocol Compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 OMA Download 1.0

Related information: *www.access-company.com/products/mobile_solutions*

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