

# XPERIA™ mini



ST15i, ST15a

# Purpose of this document

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Sony Ericsson 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

July 2011	Second released version	Version 2
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# Sony Ericsson Developer World

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# Product overview

## Xperia™ mini – Catch the action in crisp, clear HD

The world's smallest\* Android™ smartphone with HD video recording has auto focus and a photo flash, so that even dark environments look bright. You can watch a show or enjoy YouTube™ clips in true colours and high contrast on the Reality Display with Mobile BRAVIA® ENGINE. Everything looks brighter through a large, 3-inch scratch-resistant multi-touch mineral glass screen.

### Flick to it. Then pick it. With your thumb

Xperia mini is loaded with good things, so why not have them just a thumb's length away? Add up to four apps in each corner of your Home screen and you're ready for action. Not enough? Get loads more. Actually 150,000 more on Android Market™. All squeezed into a compact phone that's just bursting with power from the fast 1 GHz processor.

### Apps, maps and friends

Late for your friends? Don't be. Just use Google Maps™ to point you in the right direction and you'll be there before they are. Xperia™ mini comes with lots more - like Google Talk™ - so that you can chat with friends from everywhere.

### Facebook everywhere in Xperia™ mini

Don't forget anyone's birthday. With Facebook inside Xperia you get all your friends' birthdays directly in your calendar. Share status, likes, recommendations and more from the music player and photo gallery. Put the Music and Video Discovery widget on your Home screen and see all your Facebook friends' latest music and video recommendations. View the video. Then "like" it. Instant enjoyment.

\* "Smallest" is defined by the height and width dimensions of the Xperia™ mini compared with other available phones on the market as of June 2011.



## Facts – dimensions, weight, performance and networks

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<b>Operating system</b>	Google™ Android™ 2.3 (Gingerbread)
<b>Processor</b>	1 GHz Qualcomm Snapdragon™ QSD8255
<b>Size</b>	88 x 52 x 16 mm
<b>Weight</b>	99 grams
<b>Available colours</b>	Black White Blue* Dark pink*
<b>Main screen</b>	
Colours	16,777,216 colour TFT
Resolution	320x480 pixels
Size (diagonal)	3 inches
Scratch resistant	Yes
<b>Input mechanisms</b>	
Text input	Quick text (Zi), On-screen QWERTY and 12 key
Touch screen	Capacitive (multi-touch)
Touch gesture	Yes – multi-touch
Gesture control	Yes
<b>Memory</b>	
Internal phone storage	1 GB (up to 320 MB user free memory)
RAM	512 MB
Expansion slot	microSD™, up to 32 GB
<b>Camera</b>	
Camera resolution	5 megapixel
Digital zoom	8x
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>	
ST15i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
ST15a	UMTS HSPA 800 (Band V), 1900 (Band II), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
<b>Data transfer speeds</b>	
GSM GPRS	GSM GPRS: Up to 86 kbps
GSM EDGE	GSM EDGE: Up to 237 kbps
UMTS HSPA cat 6 (upload) 6 QPSK	Up to 5.76 Mbps
UMTS HSPA cat 8 (download) 8 QPSK	Up to 7.2 Mbps
<b>Talk time (GSM)</b>	Up to 4 hours 30 min**
<b>Standby time (GSM)</b>	Up to 340 hours**
<b>Talk time (UMTS)</b>	Up to 4 hours 30 min**
<b>Standby time (UMTS)</b>	Up to 320 hours**
<b>Music listening time</b>	Up to 25 hours
<b>Video playback time</b>	Up to 6 hours
<b>Battery</b>	1200 mAh

\* Available in bundling propositions.

\*\* According to GSM Association Battery Life Measurement Technique.

Note: Battery performance may vary depending on network conditions and configurations, and phone usage.

## Application overview list

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### **Sony Ericsson signature applications**

Sony Ericsson Home screen application  
Sony Ericsson Music player  
Sony Ericsson Timescape™

### **Sony Ericsson services**

PlayNow™ service\*  
TrackID™ application  
Sony Ericsson Sync

### **Other applications**

Facebook™\*  
Wisepilot™ turn-by-turn navigation (free trial version)\*

*\*This service is not available in all markets.*

# Full feature list

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## 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.

#### 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.

### 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.sony-ericsson.com](http://www.sony-ericsson.com).

### Sony Ericsson Local connectivity

#### A great experience for transferring media files

Transfer your media files in an easy way. Using Sony Ericsson Local connectivity, you can choose between USB mass-storage device class (MSC) mode and Media Transfer Protocol (MTP) mode. Choose MSC mode if you want to have absolute control of the storage or choose MTP mode if you want to transfer media files without risk of data corruption. Experience more with MTP using a USB cable.

### Sony Ericsson Home screen application

#### Your Home screen – just like home







Where's best for you? Email top right? Music player bottom left? You decide. Put your favourites within thumb's reach. Use the unique interface to drag and drop the applications into the corners of your Home screen. Messaging, calls, web, music, YouTube™ or your favourite apps from Android Market™ or from the PlayNow™ service. What you want, where you want.

*\* Applications from 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 size, if a representative selection of useful and fun applications is selected, is about 1 MB. This means that, on average, more than 100 applications can be downloaded and used on your device without negatively impacting performance. With the ready availability of Android Market™ application in the phone, it is also very easy to delete and later reinstall infrequently used applications.*

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




## 2. Categorised features

 <p><b>Camera</b>            5 megapixel camera            8x digital zoom            Auto focus            Face detection            Face recognition            Flash/LED            Geo tagging            HD video recording (720p)            Image stabiliser            Red-eye reduction            Scene detection            Self-timer            Send to web            Smile detection            Touch capture            Touch focus            Video light            Video recording            Video stabiliser</p>	 <p><b>Music</b>            Album art            Bluetooth™ stereo (A2DP)            Music tones (MP3/AAC)            PlayNow™ service*            Sony Ericsson Music Player            TrackID™ music recognition            xLOUD™</p>	 <p><b>Internet</b>            *Android Market**            Bookmarks            Google™ search            Google Voice Search*            NeoReader™ barcode scanner            Pan &amp; zoom            Web browser (WebKit)</p>
 <p><b>Communication</b>            Call list            Conference calls            Facebook™ application            Google Talk™            Noise Shield            Polyphonic ringtones            Sony Ericsson Timescape™            Speakerphone            Twitter™ (Timescape™ integration)*            Vibrating alert</p>	 <p><b>Messaging</b>            Conversations            Email            Google Mail™*            Instant messaging            Multimedia messaging (MMS)            Predictive text input            Sound recorder            Text messaging (SMS)</p>	 <p><b>Design</b>            Auto rotation            Four-corner Home screen            Keyboard (on-screen, 12 key)            Keyboard (on-screen, QWERTY)            Live wallpaper            Picture wallpaper            Reality Display with Mobile            BRAVIA® ENGINE            Touchscreen</p>

\* This service is not available in all markets.

\*\* Applications from 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 size, if a representative selection of useful and fun applications is selected, is about 1 MB. This means that, on average, more than 100 applications can be downloaded and used on your device without negatively impacting performance. With the ready availability of Android Market™ application in the phone, it is also very easy to delete and later reinstall infrequently used applications.

 <p><b>Entertainment</b>          3D games          Media browser          Radio (FM radio with RDS)          Video streaming          YouTube™*</p>	 <p><b>Organiser</b>          Alarm clock          Calculator          Calendar          Document readers          E-Manual          Flight mode          Google Calendar™          Google Gallery 3D™          Infinite button          Phonebook          Setup guide          Widget manager</p>	 <p><b>Connectivity</b>          3.5 mm audio jack          aGPS*          Bluetooth™ technology          DLNA Certified™          Google Latitude™*          Google Maps™ with Street View*          Media Transfer Protocol support          Micro USB support          Modem          Native USB tethering          Synchronisation via Facebook™*          Synchronisation via Google™ Sync*          Synchronisation via Sony Ericsson Sync          Synchronisation: Microsoft®          Synchronisation: Microsoft® Exchange ActiveSync®          USB mass storage          USB High speed 2.0 support          Wi-Fi®          Wi-Fi® Hotspot functionality          Wisepilot™ turn-by-turn navigation*</p>
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\* 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)

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### Bluetooth wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile v1.2 Audio/Video Remote Control Profile v.1.0 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 supporting at least one of the profiles above

More information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

[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 transmission rate	Up to 72 Mbps
Security	WEP 64 bit WEP 128 bit TKIP CCMP (AES) Open Authentication Shared Authentication 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

## Messaging

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### MMS (Multimedia Messaging Service)

MMS 1.0 is supported.

### Email

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

[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 (incl. Emergency location)

Qualcomm® GPSOneXtra

## **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) , 3GPP (.3gp); MP4 (.mp4, .m4a)
	AAC, AAC+, eAAC+	3GPP (.3gp) MP4 (.mp4)
	AMR-NB, AMR-WB	3GPP (.3gp) MP4 (.mp4)
	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, Advanced Simple Profile Level 6	3GPP (.3gp); MP4 (.mp4)
	H.264 High Profile Level 3.1	3GPP (.3gp); MP4 (.mp4)
	H.263 Profile 0, Profile 3 Level 70	3GPP (.3gp)
<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

Google Sync™

Related information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

## Web browser

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Browser version	Android 2.3 Browser (Based on WebKit)
Navigation/rendering	Pan & Zoom Landscape/portrait rendering Full page PC rendering Adobe™ Flash™ 10.1*
Search	Internet Search
Browser compliancy	HTML version 4.0 HTML version 5.0 XHTML Basic version 1.0 XHTML 1.1 CSS 2.0 CSS 2.1 CSS 3.0 JavaScript 1.7/ECMA-script 262 3rd edition DOM 2.0 DOM 3.0
Supported Device API	Geo-location API
Protocol Compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 Gzip OMA Download 1.0

\* Updates are distributed via Android market.

Related information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

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