Xperia™ neo L

MT25i

XPERIA

White paper

March 2012

SONY

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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
May 2012	Second released version	Version 2
June 2012	Third released version	Version 3

Sony Developer World

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

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Product overview

Leaflet is pending

Signature features

Xperia™ neo L 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™, calls and text communications, 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 4.0.4 (Ice Cream Sandwich)
Processor	1 GHz Qualcomm MSM8255
Size	121 × 61.1 ×12.2 mm
Weight	131.5 grams
Available colours	Glossy black Glossy white
Main screen	
Colours	16,777,126 colour TFT
Resolution	480×854 pixels
Size (diagonal)	4 inches
Input mechanisms	
Text input	On-screen QWERTY keyboard
Touch screen	Capacitive (multi-touch, up to four fingers)
Gesture control	Yes
Memory	
Internal phone storage	1 GB (up to 301 MB user free memory)
RAM	512 MB
Expansion slot	microSD™, up to 32 GB
Camera	
Camera resolution	5 MP
Photo flash	Yes – LED
Video recording	Yes – HD 720p
Front camera	Yes – VGA
Sensors	
Accelerometer	Yes
Proximity sensor	Yes
Ambient light sensor	Yes
Magnetometer	Yes
eCompass™	Yes

1.Performance metrics measured under laboratory conditions

Networks	
MT25i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
Data transfer speeds	
GSM GPRS	Up to 80 kbps (download). Up to 20 kbps (upload)
GSM EDGE	Up to 237 kbps (download). Up to 59 kbps (upload)
UMTS HSPA Cat. 6 (upload)	Up to 5.76 Mbps
UMTS HSPA Cat. 8 (download)	Up to 7.2 Mbps
Talk time (GSM)	Up to 7 hours 53 min*
Standby time (GSM)	Up to 440 hours*
Talk time (UMTS)	Up to 7 hours 9 min*
Standby time (UMTS)	Up to 410 hours*
MP3 playback	Up to 36 hours 35 min
Battery	1500 mAh, typical 1460 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
5.1 megapixel camera
Auto focus
Flash / Photo flash
Flash / Photo light
Flash / LED
Front-facing camera (VGA)
Geotagging
HD video recording (720p)
Send to web
Touch focus
Video light
Video recording

Music
Album art
Bluetooth™ stereo (A2DP)
Music player
PlayNow™ service* **TBD**
TrackID™ music recognition***TBD**
xLoud™ Experience **TBD**

Internet
Android Market™*
Bookmarks
Google™ search*
Google Voice™ Search*
Google Maps™ for Mobile with Street view and Latitude™*
Pan & zoom
Web browser (Webkit™)

Communication
Call list
Conference calls
Facebook™ application
Facebook inside Xperia™
Google Talk™ application*
Speakerphone
Twitter™ application (with Timescape™ integration)*
Video chat ready
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
Screenshot capturing
Touch screen
Voice input

* This service is not available in all markets.

Entertainment
3D games **TBD**
Accelerated Adobe Flash Video **TBD**
Gesture gaming **TBD**
Motion gaming **TBD**
Sony Entertainment Networks* **TBD**
Sweep Panorama **TBD**
Video streaming
Xperia™ Mediascape **TBD**
YouTube™*

Organiser
Airplane mode
Alarm clock
Calculator
Calendar
Contacts
Document editors
Document readers
E-Manual
Infinite button
Setup guide

Connectivity
3.5 mm audio jack (CTIA)
aGPS*
Bluetooth™ wireless technology
DLNA Certified®
Google Location Service*
Media Transfer Protocol support
Micro USB Support
Modem
Native USB tethering*
PC Companion
Synchronisation via Facebook™**
Synchronisation via Google™
Synchronisation via SyncML™
Synchronisation via Microsoft®
Exchange ActiveSync®
USB High Speed 2.0 support
USB mass storage
Wi-Fi®
Wi-Fi® Hotspot functionality*
Wisepilot™ turn-by-turn navigation* **TBD**

This service is not available in all markets.
**Requires Facebook™application installed on the device.*

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 Audio/Video Control Transport Protocol Audio/Video Distribution Transport Protocol Audio/Video Remote Control Protocol Generic Audio/Video Distribution Profile Hands-Free Profile Headset Profile Object Push Profile PAN (Personal Area Network) Bluetooth Profile Phone Book Access Profile RFCOMM with TS 07.10 Serial Port Profile
Core version and supported core features	v2.1 + EDR
Connectable devices	All products supporting Bluetooth™ version 1.2 or higher and at least one of the profiles above.

Wi-Fi®

Supported standards	802.11b/g/n
Connectable devices	Wi-Fi access points
Frequency band	2.4 GHz
Data transmission rate	802.11b to 11 Mbps 802.11g to 54 Mbps 802.11n to 72 Mbps
Security	Open Open WEP Shared WEP WPA Personal and WPA2 Personal
Encryption	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: Images 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.
Supported Bearers	Wi-Fi®
DRM Support	The Sony DLNA Certified® implementation does not support DRM-protected content.

Gaming

Chipset	Qualcomm Snapdragon MSM8x55 chipset CPU 1 GHz Scorpion Adreno 205 GPU 245 MHz
Rendering	OpenGl ES 2.0 with texture compression support for ETC1, 16 bit RAW and 32 bit RAW.
Audio	OpenGL SL with support for ADPCM, WAV, MP3 and raw AAC.

Messaging

MMS (Multimedia Messaging Service)
According to OMA Multimedia Messaging Service v1.0 + SMIL

Email

Bearer type (IP) – UMTS variant	GPRS, EGPRS, UMTS
Bearer type (IP) – CDMA	Simple IP and Mobile IP
Character sets	BIG5 Traditional Chinese GB18030 Simplified Chinese ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO-2022-JP Japanese KOI8-R Cyrillic USASCII UTF-8 UTF-16 Shift_JIS Japanese 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 STARTTLS
HTML mail	Yes (read only)

More information:

www.sonymobile.com/developer

www.openmobilealliance.org

Positioning – location based services

Supported standards:

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

- 3GPP2™ Control Plane location (incl. Emergency location)

- Cell tower and Wi-Fi® positioning

- Google Location Services

Supported satellite systems:

- GPS

- GLONASS*

NOTE: GPS and GLONASS are used together to calculate the position. With both systems active, the accuracy and robustness of the positioning is better in most conditions. The usage of GLONASS as an additional system is transparent both to users and developers, and the benefits are automatically available to applications currently using the Satellite Positioning API ("GPS Provider" in Android terminology).

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

Google Sync™

More information:

www.sonymobile.com/developer

www.openmobilealliance.org

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), 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)
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, 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)

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

Web browser

Browser version	Android 4.0 Browser (Based on WebKit™)
Browser application	Full page PC rendering Landscape/portrait rendering Pan & Zoom Off-line reading Desktop Mode Internet Search Bookmark Synch
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 SVG 1.1
Supported Device API	Geo-location API Device Orientation API File Reader API Touch Events API (including multi-touch)
Protocol compliancy	Gzip HTTP/1.1 OMA Download 1.0 TLS 1.0 and SSL 3.0

Related information:

www.sonymobile.com/developer

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