

TEMS POCKET 11.2

Product:	Handheld Test Device
Devices:	Xperia™ arc LT15i, Xperia arc LT15a, Xperia™ PLAY R800x, Samsung Vibrant™ Galaxy S 4G

TEMS™ POCKET – A COMPLETE MEASUREMENT SMARTPHONE SYSTEM IN YOUR HAND



KEY FEATURES

- Google Android™ OS
- High-performance smartphones
- Spans all major technologies: GSM, EDGE, GPRS, WCDMA, HSPA, CDMA, and EV-DO, with LTE on the way
- Automated service testing
 - HTTP file and Web download
 - FTL DL/UL
 - Voice
 - Idle
 - **Multi-RAB (concurrent voice and data) 1**
- Automated logfile upload
- Data views for idle, dedicated, RACH, data bearer, script information, etc.
- Data session event viewer for script progress tracking
- Custom logfile tag for advanced scripting with TEMS™ Discovery

- Indoor testing
 - Convenient indoor map pinpointing
 - Easy multi-floor map management
 - Support for MapInfo® .tab files for easy map configuration
 - Preplanned indoor routes for quick and easy indoor navigation
 - **Multi-pinpointing 2**
 - Import of iBwave Design 5.3 floorplans and MapInfo files
- Import of cell site data for added cell information
- Automatic processing and reporting together with TEMS Discovery ADP
- **Cell control function (RAT, band, channel, and cell lock)* 3**

Same detailed logging as TEMS Investigation, i.e., including L3/L2 and chipset diagnostics data. Post-processing in TEMS Investigation 13.0 and newer, and TEMS Discovery 3.0 and newer.

DEVICE INFORMATION

Model	Xperia arc LT15i	Xperia arc LT15a	Xperia PLAY R800x	Samsung Galaxy S 4G (Customer implementation)
Operating system	Google Android	Google Android	Google Android	Google Android
Technology: WCDMA	900/2100	800/850/1900/2100	–	1700/1900/2100
Technology: GSM	850/900/1800/1900	850/900/1800/1900	–	850/900/1800/1900
Technology: CDMA/EV-DO	–	–	800/1900	–
Radio Chipset	MSM8255	MSM8255	MSM8655	STE 5730
Cell control capability	RAT	RAT	–	RAT/band/channel/cell
Connectivity	Bluetooth™, Wi-Fi	Bluetooth, Wi-Fi	Bluetooth, Wi-Fi	Bluetooth, Wi-Fi
Positioning	Integrated GPS	Integrated GPS	Integrated GPS	Integrated GPS
Data transfer rate	UMTS HSUPA Cat. 6 (5.8 Mbps)/ UMTS HSDPA Cat. 8 (7.2 Mbps)	UMTS HSUPA Cat. 6 (5.8 Mbps)/ UMTS HSDPA Cat. 8 (7.2 Mbps)	EV-DO RevA	UMTS HSUPA Cat. 6 (5.8 Mbps)/ UMTS HSDPA Cat. 14 (21 Mbps)

* Only applicable on certain devices.



A VERSATILE, POWERFUL TESTING DEVICE BUILT INTO A CONVENTIONAL PHONE

DISPLAYED MEASUREMENTS

General

- RAT
- MCC
- MNC
- LAC
- CI

WCDMA

- UARFCN
- SC
- RSCP
- Ec/NO
- RxPower

WCDMA serving cell

- RRC state
- TxPower
- SIR
- PCA
- TPC step size
- TPC UL/DL

WCDMA RACH

- Initial TxPower
- Msg TxPower
- Max TxPower
- Preamble count
- Max preamble
- Preamble offset

HSPA data

- Cell data support (R99/HSDPA/HSPA)
- UL/DL bit rate, block error and retransmission rate on IP, and RLC
- E-DPCH happy rate (%)
- E-DPCH DTX rate (%)
- E-DPCH retransmission rate (%)
- Average E-DCH transport block size
- Average serving grant index
- HSDPA QAM rate (%)
- Number of active HARQ processes
- Number of channelization codes on HS-SCCH (min/max/avg)
- CQI (min/max/avg)
- HS-DSCH actual transport block size (min/max/avg)
- HS-DSCH requested transport block size (min/avg/max) (from CQI, 3GPP 25.214 sect. 6A.2)
- HS-DSCH actual transport block size (min/avg/max)
- HS-DSCH blocks per second
- HS-DSCH blocks successful on first attempt (%) during the last second (zero retransmissions)
- HS-DSCH blocks unsuccessful on first attempt (%) during the last second

GSM

- ARFCN
- BSIC
- RxLev
- RxQual
- C1, C2

GSM RACH

- Establish cause
- Max retransmission
- Reestablishment allowed
- Max TxPower
- TxInteger
- Random reference
- BS PA MFRMS
- Paging block index
- Paging block group
- Paging multiframe
- BS AG BLKS RES
- CCCH combined
- CCCH/PCCCH group

GSM serving cell

- TCH ARFCN
- RLT ratio
- RxQual
- Timeslots
- Timing advance
- TxPower
- Channel type
- Subchannel
- Ciphering
- Hopping
- HSN
- MAIO

GPRS/EDGE data

- Cell data support
- Best UL/DL coding scheme
- UL/DL timeslots used
- UL/DL bit rate, block error and retransmission rate on RLC/MAC
- Own/other data ratio during last multiframe
- EGPRS C-value
- EGPRS BEP
- EGPRS BEP variance
- EGPRS link adaptation algorithm

FTP

- Throughput
- Server URL
- Direction
- Port

HTTP

- Throughput
- URL
- Transfer time

Voice

- Dialed number
- Setup time
- Retries

Script General

- Iterations
- Successes/failures



Its combination of small size and powerful testing features makes TEMS Pocket a unique product