



## Smart Smartphone Measurement

# XGMA SP

## Mastering Smartphone Measurement

Today, smartphones drive the massive expansion of internet usage. Focus Infocom's XGMA Smartphone benchmark systems were the industry-first answer to that challenge and continue to be the most innovative. Our series of Android™ smartphone-based test systems help network operators meet customer expectations and deliver system availability and service performance even when it comes to measuring app based QoS performance.

## Tailored

XGMA SP can be used as a single-device system as well as for multi-device benchmarking or load generation. The system is available in different form factors depending on use case, e.g. as backpack, bag, trolley or 19" system.

## Intuitive

Thanks to its intuitive user interface and automatic device detection, XGMA SP is ready to use with just a few clicks. Using the mobile Tablet PC, the system can be monitored on the go.

## Up-to-date

XGMA SP features all the latest service tests from web browsing to YouTube™ and Multi-RAB. On top of data measurements, XGMA SP also supports telephony and speech evaluation.

## Productive

A plethora of analysis and visualization features make XGMA the most efficient tool for network troubleshooting and optimization.

## Innovative

XGMA SP was the industry-first smartphone-based benchmark solution and is still ahead of its competitors due to innovative and unique new features, like e.g. the Smart App Manager technology.

## All Terrain

With its multiple form factors, XGMA SP is the most versatile measurement system around and the right equipment for every terrain: in-car, outdoor or in-building.



XGMA Smartphone as backpack version (right) and Android smartphone running MPSPM-a (left). Individual smartphones can be detached from the backpack for handheld measurement.



# XGMA SP

## Post Processing

XGMA SP comes with all the analyzer functions of Focus Infocom's proven XGMA tool already built in. Plus, all data is ready to be further processed with FI's FIMAS Post Processing suite.

## Mobile Visual

Using the MPSM-a option, you can disconnect individual smartphones from the system for handheld or pocket use while preserving all the powerful features of XGMA Smartphone.

## Usability

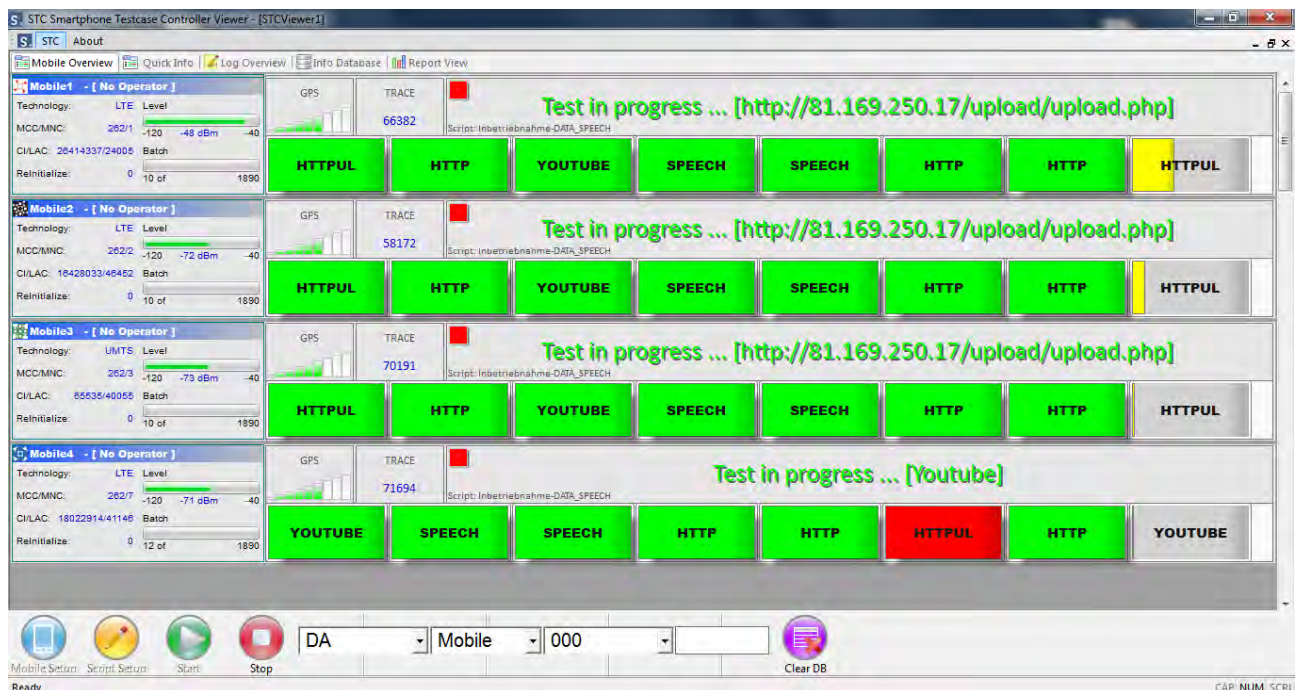
Smart script handling helps to create scripts for different devices in a fast and safe way while the intelligent scenario manager automates the assignment of predefined scripts to the complete system.

## Test Any App

With Focus Infocom's Smart App Manager technology you can create service tests for almost any app (Facebook, Whatsapp, Skype, news apps etc.) giving you true customer perspective and a new freedom in QoS measurement.

## Power Features

- Available in numerous form factors
- Scenario Manager for fast assignment of predefined measurement tasks
- MPSM-a option for maximum all-terrain mobility including mobile data visualization
- Smart App Manager technology for a true customer perspective based on real smartphone apps
- Expandable and upgradeable to new devices and service tests



# XGMA SP

## Specifications

### Supported Devices

#### Smartphones/tablets

- tablets and smartphones running all current Android versions

#### Trace Mobiles:

- Nokia: C5, C5-5MP, C7, N900, N85, N95, 6720
- most Qualcomm®-based smartphones running current Android versions

### Supported Technologies

GSM, GPRS, EDGE, UMTS, HSDPA, HSUPA, HSPA+, LTE™, LTE-A Carrier Aggregation, HetNet

### Measurement Data

IP trace data, detailed session events, GPS data, voice & video quality data, (Qualcomm®) chipset data

### QoS/Service Tests

KPI according to ETSI and beyond

#### Voice:

- MOC, MTC
- Multi-RAB
- PESQ® (ITU-T P 862.1)
- POLQA® (ITU-T P 863)
- Voice over IP (Skype™ etc.)/OTT: task specific
- Further Services (e.g. voicemail, video telephony) on request
- VoLTE ready (free upgrade option available)

### QoS/Service Tests cont'd

#### Data:

- Web browsing (various browsers)
- HTTPS web browsing
- HTTP up- and download
- Web 2.0\*
- FTP up- and download
- PING
- UDP\*

#### Messaging

- Email (POP3, SMTP, IMAP)\*
- SMS\*
- MMS\*

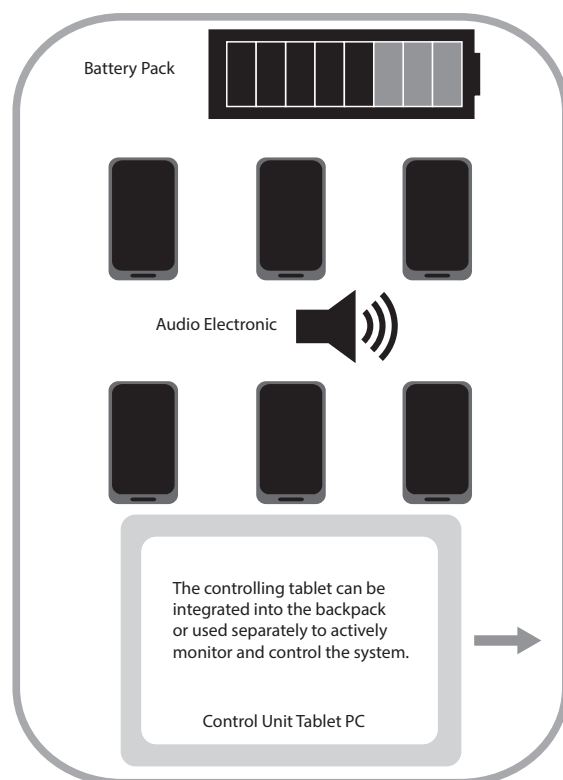
#### Streaming

- Video streaming (YouTube™ etc.)
- Video streaming MOS
- Mobile TV\*
- Web Radio\*

#### Apps

- Messaging apps, e.g. WhatsApp™, Joyn™
- Music streaming, e.g. Spotify™ etc.
- Video streaming, e.g. YouTube™, Vine™
- Social Media, e.g. Facebook™, Twitter™
- VoIP apps, e.g. Skype™
- News apps, e.g. Spiegel Online™, Guardian™, La Repubblica™, CHIP Online™ etc.

\* optional, on requests  
Specifications subject to change without notice.



The diagram shows the main components of an XGMA Smartphone backpack system: 4-6 smartphones, a controlling Tablet PC, an audio unit for speech quality tests and a battery pack. A trace phone can be added optionally.

