### **XGMA** High-end

Interactive Test Equipment For Today's and Tomorrow's Mobile Networks



### The Multi-Talent.

Collect Data. Benchmark. Generate load. Analyze. Visualize. Optimize and report. Connect any number of devices. XGMA can do it all. It's made for any technology. For today and tomorrow. It gives you the competitive edge you need in a challenging market and the resources to satisfy your customers' expectations. To put it simply: An exceptionally talented all-rounder.

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#### Easy

Data collection made easy with user-configurable views, Quick Start button and different user modes. Start right now with monitoring and optimizing your network.

#### Smartphone-based

Connect any number of smartphones for benchmarking, add modems for reference purposes or even scanners: XGMA is the most versatile solution available.

#### Performing

All major technologies and a plethora of CS and PS services are supported, making XGMA the ideal solution for now and the future.

#### All-in-one

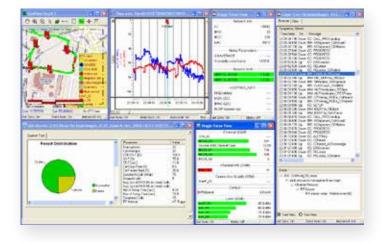
XGMA covers all your measurement needs: From data collection and visualization right down to benchmarking and in-depth analysis.

#### **Synchronized**

All views are automatically synced to always reveal a complete picture of data and related events.

#### Illuminating

Information at a glance with fully synchronized GeoView and time axis visualizations as well as multi-level message browsers.



XGMA Analyzer, XGMA Visual Pocket on Samsung S3 and XGMA Smartphone as backpack version: XGMA integrates measurement, post processing and reporting in one powerful tool.







# XGMA

#### Adaptable

Adapt the GUI to your workflow with the Workspace and Layout Managers. Share workspaces and layouts or re-apply them to other data.

#### Professional

Create professional, appealing reports based on QoS ETSI KPI with Microsoft Excel<sup>®</sup> and Crystal Reports<sup>®</sup>.

#### Communicative

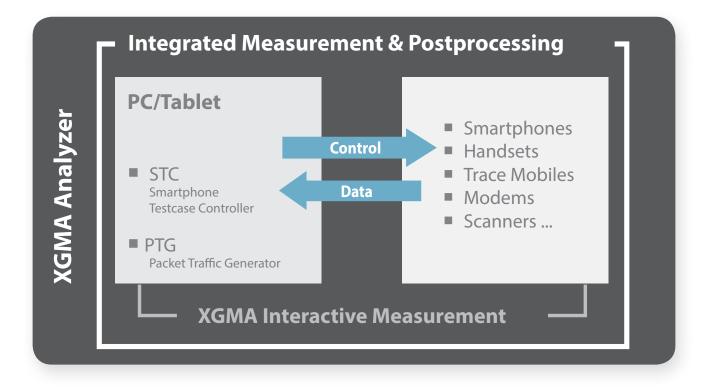
Analyze your data with Focus Infocom's or third party products thanks to XGMA's open data architecture and numerous export functions.

#### **Visual Pocket**

XGMA Visual Pocket is an option that lets you disconnect individual smartphones from the system for pocket use while preserving all the powerful features of XGMA Smartphone.

#### **Power Features**

- LTE<sup>™</sup> ready
- Optional smartphone-based benchmarking in different versions
- Numerous service tests for voice and data including POLQA<sup>®</sup> and Multi-RAB
- 1-click QoS reports
- FITA automatic call analysis
- A single tool for data collection, post processing and reporting
- XGMA Visual Pocket for maximum all-terrain mobility including mobile data visualization



# XGMA

#### Specifications

#### **Supported Devices**

#### Fully Smartphone-based (tests run on

#### smartphone):

- Android 2.2 and 2.3 smartphones
- 10 Android 3.0 tablets
- Android 4.0

#### **Commercial Handsets and Modems**

Most modern mobiles in tethered mode 10 Full support of QoS testing (customer perspective)

#### **Trace Mobiles:**

- Nokia: C5, C5-5MP, C7, N900, N85, N95, 6720
- 10 Many handsets and modems with Qualcomm<sup>®</sup> chipsets (L3 Trace)

#### **Data Modems:**

- Huawei: E176 (HSPA), E182 (HSPA+), E398 (LTE<sup>™</sup>)
- Sierra Wireless: 87xx (HSPA+), 77xx (LTE<sup>\*\*</sup>)
- н. Others on request

#### Scanners:

- Scanning Handsets
- Rohde&Schwarz: TSMW
- P/N Scanner type PCTEL 10
- P/N Scanner other types (optional) 10
- LAN Mode (enables Hotspot/WiMAX QoS testing)

#### **Supported Technologies**

GSM, GPRS, EDGE, UMTS, HSDPA, HSUPA, HSPA+, LTE<sup>™</sup>, GSM-R, TETRA

#### **Measurement Data**

IP trace data, detailed session events, GPS data, voice & video quality data

#### **OoS/Service Tests**

KPI according to ETSI and beyond

#### Voice:

- MOC, MTC
- ITU-T P 862.1 (PESQ®)
- ITU-T P 863 (POLQA®) 10
- ÷., Voice over IP (Skype<sup>™</sup> etc.)/OTT: task specific
- Further Services (e.g. voicemail, video telephony) н. on request
- ÷. VoLTE ready
- н. Data:
- Web browsing (various browsers) 10
- HTTP up- and download н.
- ×. Web 2.0
- ×. FTP up- and download
- PING н.
- UDP on request н.

#### Messaging:

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

#### Streaming:

- Video streaming (YouTube<sup>®</sup> etc.)
- Video streaming MOS
- Mobile TV\*
- Web Radio\* 10

#### **Visualizations**

- Multitudinous data visualizations including:
- Geo Views
- Multi-track Time Axis
- Single Value
- Data Table
- Excel View
- Layer 3 Decoder
- RLC/MAC Decoder **QoS Monitor**
- Alarming
- Waypoints **Root Cause Analysis**
- Phone based scanning
- GSM, WCDMA, LTE Scanner View
- Scatter View Google Earth
- **Open Street Map**

#### **Analysis Functions**

XGMA offers a wide range of analysis functions including:

- FITA Auto Call Problem Analysis
- SIB Analysis
- Technical Reporting
- Handover Analysis
- **RRC** Analysis
- GSM L3 Analysis
- Full Text Finder for 2G and 3G Layer Messages

#### **Report Functions**

- **High-level QoS Reports**
- Time-Profile View
- 10 Transaction View
- н. User and technical View KPI
- Integrated Microsoft<sup>®</sup> Excel<sup>®</sup>-based reporting
- Integrated Crystal Reports

#### **User Interface**

- Numerous predefined workspaces and layouts,
- fully customizable, reusable and shareable
- **Ouick Start button**
- н. Easy to use GUI

#### Versions

XGMA is available in different versions: from basic cost-effective standalone installations to full-featured multi-device editions, plus Analyzer versions for visualization, reporting and data analysis only. Also available: Visual Pocket, an option that lets you disconnect smartphones for independent measurement right in your pocket.

Contact Focus Infocom to find the solution that best fits your needs.

\* Service support depending on devices Specifications subject to change without notice.

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