



The ENENSYS eBox is a complete, compact and portable test tool, used to validate Video and Files Content Delivery over LTE networks

eBox is used by content providers, device manufacturers, Mobile Network Operators, and application developers to evaluate and demonstrate their streaming video and OTT content delivery offers, over a LTE network in compliance with the 3GPP specifications.

Included components

eBox is a real LTE Broadcast network. It includes a RAN (MCE/eNodeB), an EPC (MME, MBMS Gateway, S/P-Gateway, HSS), and a BM-SC server, the MediaCast Mobile. It comes in a small box, with all components pre-integrated - shortening test cycles and time-to-market. All components are 3GPP compliant and carrier-grade. It supports any LTE Broadcast enabled hand-held device integrated with the ENENSYS CubeAgent Middleware or any other 3GPP compliant Middleware.

Full eMBMS (LTE-Broadcast) support

eBox is geared with a fully 3GPP eMBMS compliant BM-SC.

eBox BM-SC supports 3GPP MoD (Multicast Operation On-Demand). It monitors content viewership and switches distribution automatically to Multicast upon detection of customer-configured thresholds.

Rich and flexible scenario support

eBox supports a full set of rich content distribution use cases, including DASH, live video delivery, RTP like streaming, MoD (Multicast operation on Demand), network continuity, filecasting. Each scenario can easily be played/modified through the application interface.

User-Friendly GUI interface, easy to set-up and configure

A GUI allows you to play/Modify registered scenarios, monitor LTE traffic, manage LTE band, and cells gain, monitor File Repair, Reception Report, and Consumption Reports. As well as upgrading all components of the eBox.

Applications

- Live TV streaming optimisation
- VoD catalogue push
- FOTA over multicast
- Device certification
- Device validation

Other benefits

- Small and portable
- Easy to set-up and configure
- Shortens time-to-market
- Smoothes out validation tests
- Extremely cost effective
- Reduces investment risks

Technical specifications

INPUT

1xGigabyte Ethernet RJ45 for the integration with CDN

- HTTP(s) for injection of external Content (DASH, HLS, Files)
- RTP for injection of external video streams
- Rx for PCRF

WiFi AP for control functions

OUTPUT

3GPP Release

LTE release 15, MBMS release 13 (TS 26.346)

RF Max output power

15dBm - 20 dBm

Bandwidth

1.4, 3, 5, 10, 15 and 20 MHz in LTE

RF Antenna

2 for the configuration with one cell and 4 for the three cells configuration

Frequency bands

All FDD and TDD bands with support of custom frequencies (400MHz to 4.4GHz)

TX Output Power Gain Range

TX Output Power Gain Range: 0 dB - 31 dB

Supported number of cells

1 or 3

FEATURING

Proven BM-SC

Expway eBox LTEB integrate a full functional BM-SC and MBMS-GW servers version that are also deployed by network operator

MooD

Dynamic Activation and De-Activation of Multicast delivery

RTP Stream Management

Support of injection of external Unicast and Multicast RTP streams

File Download

Predefined scenarios for the validation of file delivery (binary and VoD)

Simple Scenario

Expway eBox LTEB comes with predefined scenario set that helps the user to start the validation

Dynamic Resource Allocation

Expway eBox LTEB implement the dynamic allocation of the MBMS resources

DASH Stream Delivery

Pre-recorded DASH segments and interface with external CDN source

Multiple Cells

Possibility to control 1 or 3 cells for the validation of handover scenario

PHYSICAL

Height

225 mm

Depth

319 mm

Hard drive

SSD 250 Go

Width

178 mm

Power Supply

100-240V 50/60Hz

Ordering codes

eBox

LTE Broadcast platform for Content Delivery over LTE

Ordering options

eBOX-Multi

One Additional Cell Radio (2 max total), pre-installed