Flexible Test Environment for European eCall Compliance to Application Tests

Signalling Tester MD8475B
SmartStudio MX847570B
W-CDMA Simulation Software MX847510B
GSM Simulation Software MX847520B
LTE Simulation Software MX847550B
eCall Tester MX703330E
eCall Tester MX703330E-PL010
Multi-cell Option MX703330E-061

Focused on IVS and TCU eCall Functions

Officially (EU) 2017/79 defined that (EU) 2015/758 lays down a general obligation for new types of vehicles of categories M1*1 and N1 to be equipped with 112-based eCall in-vehicle systems as of 31 March 2018. eCall is an emergency rescue information system for automatically transmitting traffic accident information, including accident location, as well as for making voice calls to an emergency assistance centre, or Public Safety Answering Point (PSAP). Since achieving zero traffic accidents may be an impossibility until self-driving automobile technology comes into full use, a key aim of this system is providing life-saving emergency assistance as soon as possible after an accident.

In addition to deployment in Europe, the eCall system will soon be deployed in ASEAN member countries of Asia.

*1 M1 Category: Passenger vehicles with driver and 8 or less seats; N1 Category: Trucks up to 3.5 tonnes max. load weight

Versatile Support for Compliance to Application Tests

The eCall Tester MX703330E with PSAP server function*2 and Signalling Tester MD8475B for mobile network simulation support configuration of the type-certification test environment, compliant with the applicable EN standards and evaluated in accordance with EN 16454. Target tests are in compliance with the test items listed in the (EU) 2017/79 Annex and EN16454 standard requiring a mobile network simulator and PSAP simulator. As well as supporting eCall type-certification tests, the MD8475B also supports laboratory function tests at the R&D phase.

Additionally, the SmartStudio Manager automation software reduces operation errors by test engineers to support eCall function quality tests at repeat and exhaustive testing.

The versatile eCall Tester software supports the following tests for improving IVS quality.

*2 PSAP Server = Public Safety Answering Point emergency response equipment
Emulate eCall Tests while Driving

The IVS can make calls over eCall at any time while driving. Since eCall calling uses cellular mobile networks, complexed evaluation with the various changing parameters and network signal strength is required. With an interactive UI for cellular network handover tests, the MD8475B and MX703330E simplify compliance testing.

Test Telematics Multi-function IVS eCall Operation

Tests of IVS with telematics functions as well as IVS with special functions are all supported. For example, when a traffic accident occurs during communication using LTE, the IVS using packet data communication immediately before the accident must issue the eCall over GSM or W-CDMA by switching the wireless communications network using the CS Fallback function. The eCall Tester system can simulate this network switching.

Combining Anritsu's mobile network simulator MD8475B with the PSAP server function built into the eCall Tester MX703330E software offers a simple GUI for running complex cellular tests to help improve IVS quality and reliability.

For Telematics Module Development

Development of telematics modules requires high throughput. This not only supports LTE but also supports the LTE Carrier Aggregation (CA) function.

With the latest LTE technologies, just one MD8475B is all that is required for 1-Gbps high-throughput tests supporting Carrier Aggregation.

Ordering Information

Please specify the model/order number, name and quantity when ordering. The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.

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<td>W-CDMA test software</td>
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<td>MX847520B</td>
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<td>MX703330E-PL010</td>
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*1: MX847550B-020 supports 2×2 MIMO and MX847550B-021 supports 4×4 MIMO.
*2: MX847550B-040 supports 2CC, MX847550B-041 supports 3CC and MX847550B-042 supports 4CC.

Contact your sales representative for more details.