

WCEX-CGTS V2X network congestion traffic generator

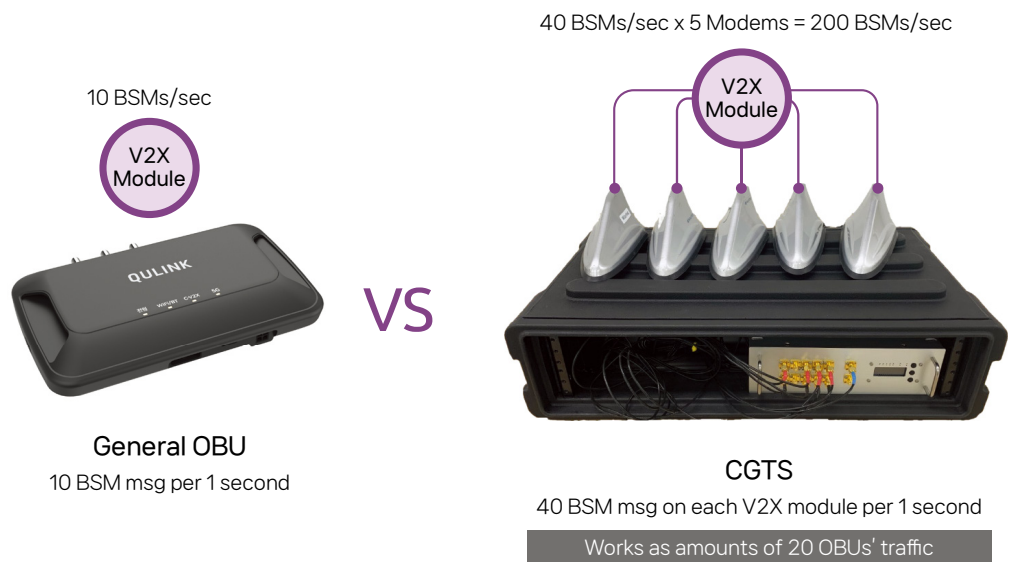
The WCEX-CGTS is a state-of-the-art virtual V2X message transmission test system capable of simulating V2X communication congestion environments. It supports the integration of up to 5 V2X modems and GNSS, providing a comprehensive platform for testing and evaluating the congestion control functionalities of V2X modems. It enables communication stack load testing, making it an essential solution for developers and research institutes aiming to enhance the efficiency and reliability of V2X communication systems.

Features

- * A system for transmitting large volumes of V2X messages to create V2X communication congestion environments
- * Built-in support for up to 5 V2X modems and a GNSS system
- * Used for V2X modem congestion control functionality, communication stack load testing, and more

Functions

- * Compatibility and transition between IEEE 802.11p and 3GPP Rel.14 PC5
- * Up to 200 Hz for static V2X messages (200 messages per second) / Up to 80 Hz for real-time changing BSM (80 messages per second)
- * Analysis of channel congestion impact in scenarios with a high concentration of devices (OBUs)
- * Analysis of adjacent channel interference effects (DSRC & C-V2X)



Titles	Spec
V2X Conformance Test standard	SAE J2945/1, SAE J3161
V2X Radio Standard	KR(ITSK-00137-6), EU(Car-2-Car), US & CN(TBD)
V2X Message Set Standard	KR(KS R 1600), US(SAE J2735), EU(ETSI ITS TBD), CN(TBD)
V2X Message Security	IEEE 1609.2 bundle certificate support (TBD)
Modems in Unit	5
SPS Flow Period in Modem	50, 100, 200, 500 ms
Message Generation Method	Zero Filling, 1-Filling, Random Filling, User Preset, Actual BSM(TBD)
Message Retransmission	Support Blind Retransmission
Unit I/O Port	V2X Main & Sub Antenna pairs : 5, GNSS Antenna In : 1, 1PPS Out : 1, Ethernet : 1
Power Consumption	110V / 220VAC 1.8A Max
Unit Size (Inc. Exterior Housing)	403.2 x 155.6 x 562.0 (W x H x D, mm)
Unit Weight (Inc. Exterior Housing)	8.62kg