EVOIA DRIVE TEST

HTB-EER19

Leading technology for troubleshooting and quality assessment
for GSM-R, MCX and private telecoms networks

Introducing the HTB-EER19

The EVOIA Drive Test HTB has been designed for simplicity and ease of use in any trains, location or environment. To deploy, simply switch on, leave to run in unattended mode and begin the journey to your destination.

Each HTB is packaged with 2 MNO Modems or 2 radio modules and a scanner.

The traces from modem/radio data are collected continuously throughout the test execution and enable analysis of 2G, 3G, 4G, 5G and MCx.

Using an internal 4G modem, the data is uploaded to a central server to conduct deep analysis. You can also aggregate data coming from several campaigns from the same or different HTB units, or any other drive test solution.

Key Benefits

- Unattended Unit, equipped with
    — 2 Modems
    — 1 Scanner R&S TSME 6

- Unattended, automatic operation of drive tests: monitors GSM/GSM-R, 3G, LTE/4G and 5G network quality

- Simple to install: documentation and support for third party installation and configuration

- Test and measure: public and private telecoms networks

- Test railway and telco: coverage, handovers, failures, access time

- Test MCx: ETSI KPIs 1,2, etc.

- Test application: throughput, latency, round trip time, MOS, etc.

- Can be used inside test or commercial trains

- Real-time, continuous monitoring, internal backup battery for up to 30 min.

- Simple plug and play on-board installation

- Robust and reliable solution

- Low product lifecycle costs with a compelling Return on Investment (ROI)

- Helps to identify telecoms and network problems

HTB-EER19

Professionally designed and developed to make the most of the available space and the technical capabilities required.

Test runs can be conducted as single events or as part of a regular schedule.

Key Features	Unattended Unit
Product number	x-HTB19EEFC01 (x = R Rail, x = M MCX MNO)
Dimension	W: 426 mm (19 in), H: 178 mm (4RU), D: 435 mm
Weight	22 Kg
Power	Internal Lithium Battery Pack
	230 VAC or 24 VCC - 300 W (max)
Network testing supported	2G, 2G-Rail, 3G, 4G, 5G
Testing for	Radio test, telecom quality of service including dropped calls, initiation time, and throughput
Data collection	Unattended Unit
Data Transfer	Though 4G Modem or Ethernet
Software operating system	Unattended Mode: Software installed on an internal URD
Operational mode	Attended or Unattended mode
	MNO: Up to 2 EMIB-XG (LTE,5G)
	MCX: Up to 2 EMIB-XG (LTE,5G) and 1 NTP Sync
	Rail: Up to 2 EMIB-R (GSM-R 8W) Up to 2 EMIB-R (GSM-R 2W)
	MCX-Rail: 1 EMIB-XG (LTE,5G), 1 EMIB-R (GSM-R 8W) and 1 NTP Sync
	Scanner Option: Up to 1 Scanner
Positioning	Internal GPS and TTL Odometry Input
Post-processing capabilities	After post-processing, data can be exported in .csv format, to be re-used in 3rd party applications

HTB-EER19 continued

Key Features	Unattended Unit		
Devices supported	**VENDOR**	**TYPE**	**MODEM**
	Sierra Wireless	Modem-4G	EM7575
	Simcomm	Modem-4G-VoLTE	SIM7600
	Quectel	Modem-4G	EM12G
	Telit	Modem-4G	LM960A
	Telit	Modem-5G	FN980
	Funkwerk	Modem-GSMR	MT2
	Funkwerk	Modem-GSMR	MT5/FPL R99
	Tunkwerk	Modem-GSMR	MT5-AD/FPL R04
	Tunkwerk	Modem-GSMR-DCS	MT6
	Triorail	Modem-GSMR	TTS-TRC-5RMe
	Triorail	Modem-GSMR	TTS-TRC-6RM
	Triorail	Modem-GSMR	TTS-TRM-5
	Triorail	Modem-GSMR	TTS-TRM-6
Solution	Certified and customized solutions (software and hardware) available		
Antenna	RF Patch available on the side of the box – N or SMA Female RF connectors		
Battery	Lithium Backup Battery Bicker PN: BP-LFP-13250S Certified UN 38.3		
Stand-alone receiver availability	EVOIA Drive Test supports Rohde & Schwarz scanner model: TSME6 with each appropriate License-KEY		
Certification	EN 50155, EN 50121-3-2, EN 61000-6-2		
	Temperature OT3 (from –25°C to +70°C)		

HTB-EER19 continued

Included Components

Catalog Number	Description
x-HTB19EEFC01	Hybrid Terminal Box 19 in. EE Height: 4U Power: 230VAC; Opt – Unattended
C-ACC-BATLIT01	Internal Lithium Battery Pack
C-ACC-TMEE0103	Trackmotion-EE –GPS Connector type SMA
x-MSP-SRUG4	Main System Processor for Unattended Module
x-URD-SRUG52	URD - Option High Performance for HTB-U
C-OPT-GTW1201	OPTION Gateway equipped with 2 MODEM – for Unattended Management
C-HWC-A210210G	GPS Antenna
C-ACC-ETH150	Ethernet Cable

Optional Accessories

Catalog Number	Description
x-S-TSME6-CAL	Rohde & Schwarz Scanner TSME6 with Calibration Document
R-HWC-A220313	PCTEL - MLPV 800 Antenna for Scanner
R-HWC-A220314	PCTEL - BMLPV800HD Magnetic Mount

Note:
x=R Rail Configuration
x=M MCX-MNO Configuration

HTB-EER19 Configurations

Configuration MNO 4G-5G

Catalog Number	Description
M-CEMIBXG1105103	Channel 4G-5G EMIB-XG (up to 2)

Option for configuration MNO 4G-5G Modem

Catalog Number	Description
TLLM960A18	Test Modem Telit LM960A18 4G - CAT18 MIMO 4x4
TLFN980	Test Modem Telit FN980 5G
SCSIM7600	Test Modem SIMCOM SIM7600 - 4G VoLTE
SWEM7565	Test Modem Sierra Wireless EM7564 4G - CAT12 MIMO 2x2
QTEM12G	Test Modem Quectel EM12G

HTB-EER19 Configurations continued

Configuration MCX

Catalog Number	Description
M-CEMIBXG1105103	Channel 4G-5G EMIB-XG (up to 3)
M-OPT-SY_NTP01	NTP Time Sync

Option for configuration MCX Modem

Catalog Number	Description
M-QTEM12G	Test Modem Quectel EM12G

Configuration GSM-R

Catalog Number	Description
R-CEMIBR2200104	GSM-R Channel for 8W Cab Radio (up to 2)
R-CEMIBR1100104	GSM-R Channel for 2W Radio - SMA front connector (up to 2)

Option configuration GSM-R modem

Catalog Number	Description
R-TR-TTSTRM5C	Triorail TTS-TRM5 2W
R-TR-TTSTRM6C	Triorail TTS-TRM6 (*) 2W
R-FK-MT2-SI10T	Funkwerk MT2 8W
R-FK-MT5ET	Funkwerk MT5 8W – REL99
R-FK-MT5EADT	Funkwerk MT5 8W – REL04
R-TRTTSTRC5RME	Triorail TTS-TRC5 RMe – 8W
R-TRTTSTRC6RM	Triorail TTS-TRC6 RM –8W

VIAVI

viavisolutions.com/railway

Contact Us   +39 011 4532181
To reach the VIAVI office nearest you, visit viavisolutions.com/contact