

MultiDSLAs Controller Datasheet

This Datasheet describes features, specifications and ordering information relating to the MultiDSLAs Controller. A complete test system consists of a MultiDSLAs Controller user interface application, plus one or more types of 'node' device - DSLA (Analog), VPP (SIP)

See also the following:

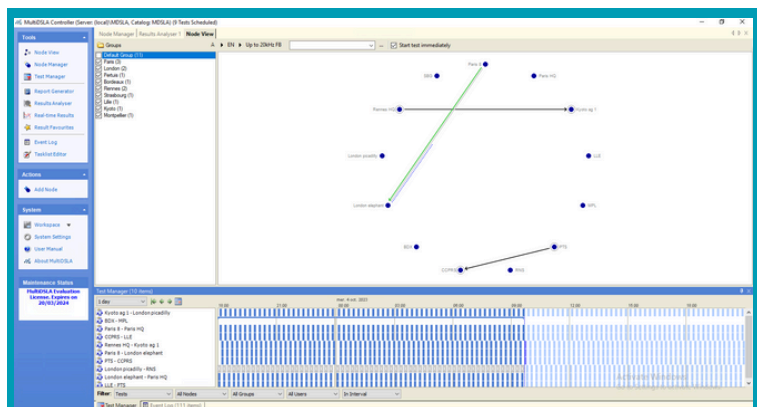
- MultiDSLAs Nodes Datasheet, for details of all node types
- MultiDSLAs Brochure, for a general description of the MultiDSLAs system
- Audio Streaming Integrity Brochure, for details of this option
- VQMaaS datasheet for observability cloud-based offer

MultiDSLAs PC minimum recommended specifications:

- Intel Core i5 processor or equivalent (Minimum), 4 vCPU or more for virtual machines
- 4GB memory minimum, 8GB recommended
- Windows 10 Pro; Windows 11 Pro; Windows Server 2016; Windows Server 2019; Both 32-bit and 64-bit versions of all Operating Systems.

System Scaling

- Nodes: 100's (depending on number of simultaneous tests required)
- MS SQL Database: Can be configured locally on the MultiDSLAs Controller PC or on an independent server.
- SQL Server 2019 Express edition provided. You can upgrade to standard edition to extend storage capabilities



Reports and Data

Reports

locally through the GUI or remotely through web browser.

select the Nodes, time interval of interest, parameters and appearance.

Summary: Histogram representation of user-selected measurements, with Pass/Fail indication

Connections: Graphical presentation of speech quality scores between node pairs, showing the Perceptual Expectation Gap

Trend: Graphical representation of user-selected measurements showing trends over time

Exports

Results Export - sets of numerical and graphical results which open in another MultiDSLAs system or in the free Speech Performance Viewer

Test Export - full data for importation into another MultiDSLAs system

Export results to csv and txt file formats
Open in Excel spreadsheet

JSON/BSON export - send all metrics to external datastore (elastic or mongoDB)

Test Control

Manual or scheduled test execution

Automation scripting languages supported:

- Python
- Rest API

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Test Call Management

Automated Call Control

- On hook, off hook, dial, ring detect for POTS services
- Smartphone Control app for Android
- TAPI/JTAPI Call control integration to soft-switches

Call Setup Analysis

- Initial Response, Post-Dial Delay, call setup recording
- SIP messaging display with analysis

Measurement Summary

Scores

- POLQA, PESQ, PEAQ with graphical analytics, VISQOL intégration, NISQA (December2023)

Signal Levels

- Mean Active, Peak and RMS speech
- Noise level
- DTMF analysis

Delay

- One-way and round-trip speech

Echo

- Up to three echos, level, loss, delay (analog domain)
- Simulation of echo signal and delay for echo canceller performance assessment

Speech Recognition

- for IVR and Messaging systems
- perform Speech to Text translation

Telephone Tester

- SLR, RLR, STMR, TCL
- send and receive distortion
- out-of-band

Product N°	Model	Description
MultiDSLAs System		
User Interface & Controller Software		
000105	MUI-ESSENTIALS-SKM	MultiDSLAs software essentials bundle includes PE EQ DTMF and PESQ - Software Key Management
000106	MUI-ESSENTIALS-DKM	MultiDSLAs software essentials bundle includes PE EQ DTMF and PESQ - Dongle Key Management
MultiDSLAs Options		
000003	MUI-DS	MultiDSLAs User Interface 5 additional devices
000007	FP	File Processor
000008	SC	Smartphone Control
000103	TT	Telephone Tester (Speciality Metrics)
000137	SPR	Speech Recognition Option (Requires at least 1 SPR-200T)
000138	SPR-200T	Prepaid 200K speech recognition transactions of 15s max each
000172	CONNECTOR-JSON	Export Data - json and Bson
Speech & Audio Quality Metrics		
PESQ and related		
000098	PESQBE	PESQ P.862 speech quality metric w/h British English
000099	PESQAE	PESQ P.862 speech quality metric w/h American English
000101	PAMS	PAMS speech quality metrics. Requires either PESQAE or PESQBE
000102	PSQM	PSQM Speech Quality Measure. Requires PAMS
POLQA Software Only		
000090	POLQA2EC	POLQA® P.863 speech quality metric for 2 effective channels non transferable
000091	POLQA4EC	POLQA® P.863 speech quality metric for 4 effective channels non transferable
000092	POLQA6EC	POLQA® P.863 speech quality metric for 6 effective channels non transferable
000093	POLQA8EC	POLQA® P.863 speech quality metric for 8 effective channels non transferable
000094	POLQA10EC	POLQA® P.863 speech quality metric for 10 effective channels non transferable
000095	POLQA12EC	POLQA® P.863 speech quality metric for 12 effective channels non transferable
000096	POLQA14EC	POLQA® P.863 base license for large systems (14EC) non transferable
000155	POLQA2EC-ADD	POLQA® P.863 speech quality metric for 2 additional EC (requires POLQA2EC at least) non transferable
Audio Metrics		
000173	PEAQ-ODG	PEAQ Audio Quality metrics. Requires DSLA1IC 48k
000107	ASI	Audio Streaming Integrity Metrics

Supported Measurement

- ITU-T Rec. P.56 Mean Active Speech Level
- ITU-T Rec. P.863 POLQA
- ITU-T Rec. P.862, 862.1, 862.2 PESQ
- ITU-R BS.1387 PEAQ
- ITU-T Rec. G.107 E-Model

Pre-Defined Tests

- Connection Test - confirms the presence of a speech path between two nodes.
- Quick Quality Check - runs two speech quality tests in each direction and measures delay.
- Full Quality Check - assesses speech quality through several tests in each direction using a wide range of speech sounds and measures delay.
- Engineer evaluation - runs SQM at different output level to assess DUT or SUT best results

User-Defined Alerts

- Alert on measurement or system exception
- Create Boolean combinations