DOCSIS
3.1 SOLUTION

Jupiter 310
Design Verification System

Automate your DOCSIS PHY-layer testing with the **industry-standard Jupiter 310** – a modular and **flexible** solution for **comprehensive** device **test coverage.**

Averna

Jupiter 310
Design Verification System

Highlights

Integrated DOCSIS 3.1 PHY ATP, automated Test Executive, Test Plan Editor, reports, Dashboard for instrument monitoring/control, logging and troubleshooting tools

Other Broadband Products

DP-1000 DOCSIS Protocol Analyzer
Industry-leading tool for real-time MAC-layer visibility and performance

DOCSIS Manufacturing Verification Test System
High-volume DOCSIS compliance testing for customer-premises equipment (CPE)

DOCSIS Channel Emulator (DCE)
Ideal for SCTE 40 certification and network troubleshooting

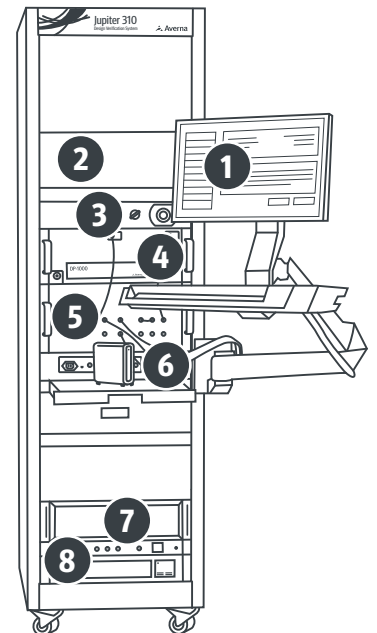→ ## Want to speed up your CPE design verification?

Jupiter is the industry standard for automated DOCSIS physical (PHY) layer testing. It provides the most comprehensive test coverage and accurate results on the market for DOCSIS 3.1 devices.

→ ## Accelerate Your Product Development and Time-to-Market

Certification labs, MSOs, standards bodies and leading product manufacturers use Jupiter to test cable modems, set-top boxes, residential gateways and other customer-premises equipment (CPE). It enables comprehensive, automated PHY layer testing, helping dramatically reduce DOCSIS 3.1 design verification times early in the product lifecycle and speed up time-to-market.

→ ## A Complete DOCSIS 3.1 Design Verification Solution

1 Built-in DOCSIS 3.1 PHY ATP Test Scripts, Productivity Tools, Reports & More

2 Cable Modem Termination System (CMTS)

3 E-Stop Safety Button

4 Averna DP-1000 DOCSIS Protocol Analyzer and Vector Signal Analyzer/Generator (VSA/VSG)

5 RF Interface Unit

6 CPE – Units Under Test (UUTs)

7 Packet Generator / Industrial PC

8 Power Distribution Unit (PDU) / Uninterruptible Power Supply (UPS)

→ A Wide Range of Features and Capabilities

Test & Productivity Tools

- Integrated CableLabs© PHY layer acceptance test plan (ATP)
- Averna Test Executive for automated testing and results
- Test Plan Editor to modify PHY procedure test cases
- Toolkit for updating test sequences and syncing the ATP
- Dashboard for instrument/modem monitoring and control
- Admin tools for measurement and trace queries/reports
- Diagnostic tools for quick troubleshooting and support
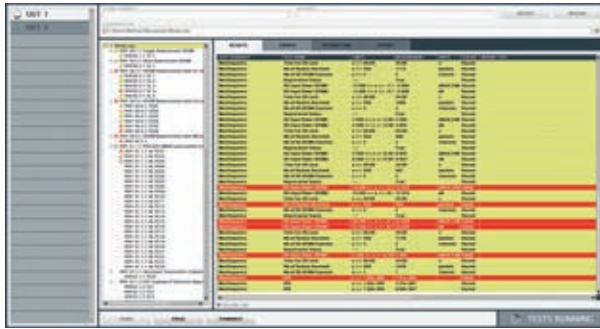
Instruments & Hardware

- A DOCSIS 3.1 cable modem termination system (CMTS)
- Packet generator and Averna's DP-1000 DOCSIS Protocol Analyzer
- DOCSIS VSA/VSG, controller, HDD, RF Interface Unit
- Self-testing fixture with automated calibration steps
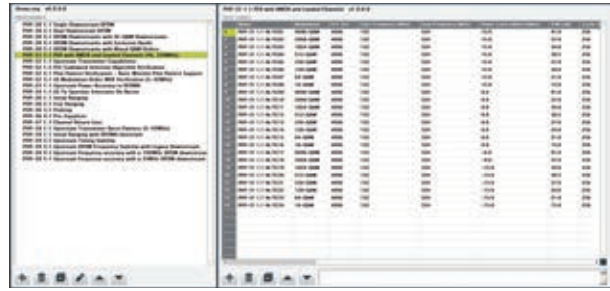
Services & Support

- Includes 1 week of onsite installation and Jupiter training
- Additional onsite training/support available for PHY layer testing
- Includes 1 year of software support/updates (SSUP) and warranty
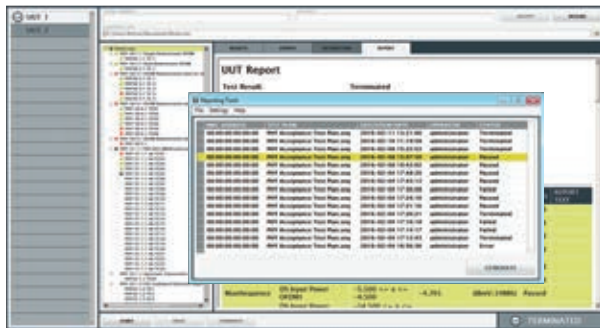- Access to Averna engineers, knowledge base, documentation
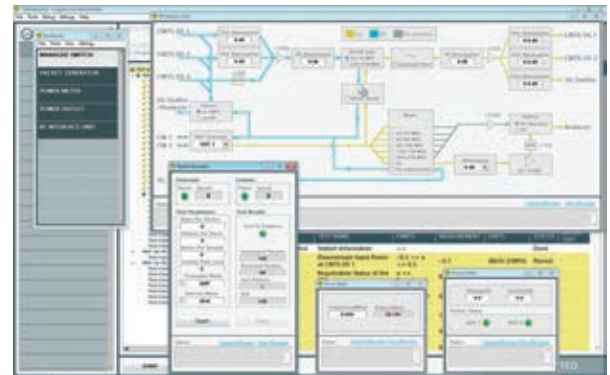
Powerful Productivity Tools

Averna Test Executive
Automate tests and get results fast

Test Plan Editor
Modify PHY procedure test cases

Reporting Tools
Generate reports and extract measurements

Dashboard
Control and monitor all integrated instruments

Complete DOCSIS 3.1 PHY Test Coverage for Your CPE

Today, many organizations the world over have standardized on Jupiter, making it an integral part of their DOCSIS certification success. Averna has integrated CableLabs© DOCSIS 3.1 acceptance test plan (ATP) for the physical (PHY) layer into the Jupiter 310. With automated PHY tests, a Test Plan Editor, an update module and built-in reports, Jupiter indicates exactly when your CPE products are ready for certification.

PHY Test Case	Transmission	Description
PHY 30	Downstream	Downstream Input
PHY 31	Downstream	Error Rate Performance Tests
PHY 32	Upstream	Upstream Transmitter Capabilities
PHY 33	Upstream	Upstream Transmit Output Power
PHY 34	Upstream	Upstream Noise and Spurs with Transmitted Burst On
PHY 35	Upstream	Upstream Noise and Spurs with Transmitted Burst Off
PHY 36	Upstream	Upstream Ranging and Equalization
PHY 38	Upstream	Upstream Transmitter Burst Flatness
PHY 39	Upstream	Cable Modem Timing and Synchronization
PHY 40	Upstream	Proactive Network Maintenance

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