# SPIRENT DLS

SPIRENT PHYSICAL LAYER SOLUTIONS

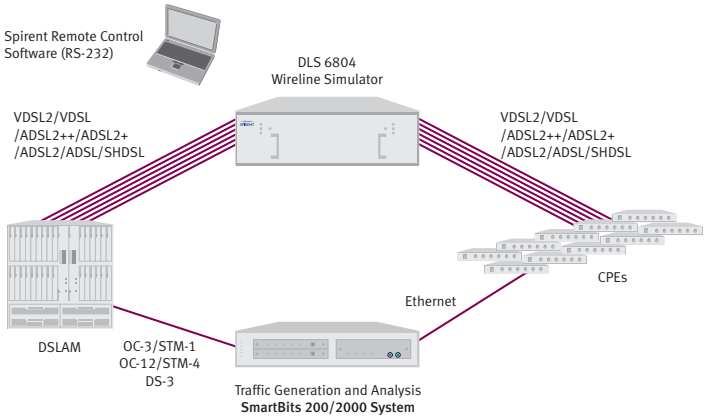
# DLS 6804 EUROPEAN MULTI-LINE PRODUCTION WIRELINE SIMULATOR

VDSL2/VDSL1/ADSL2++/ADSL2+/ADSL2/ADSL and SHDSL

## OVERVIEW

The DLS 6804 is a high density multi-line production wireline simulator in a 6U rack-mountable chassis. It provides for wide bandwidth with reaches up to 4950 metres, suitable for VDSL2/ VDSL/ADSL2++/ ADSL2+/ADSL2/ADSL and SHDSL production and verification testing. The DLS 6804 production-grade simulator is designed to complement the DLS 8230 series of VDSL2 lab-grade wireline simulators used for highly accurate design, conformance and performance testing. The DLS 6804 provides a lower cost/lower performance alternative for manufacturing testing and simulates wireline parameters such as attenuation and impedance using passive components.

Spirent Communications' DLS products are the worldwide standard for physical layer equipment used in conformance, performance and interoperability testing. With extensive market and technology expertise gained from years of research and active participation at all major standards meetings including ETSI, ANSI, ITU-T, IEEE 802.3, and DSL Forum, Spirent DLS equipment provides the industry's most accurate and repeatable results—ensuring your equipment is designed for peak performance.




## FEATURES AND BENEFITS

- **Flexible Multi-line Configurations:** The user can choose between an 8- or 12-line configuration. These models provide the end user with the flexibility to decide the number of lines per chassis based on their actual testing requirements, such as total number of lines under test
- **6U Rack-Mountable Chassis:** Supports high-density DSLAM port testing (e.g. 48, 72, 96 lines and higher) by stacking multiple modular 6U chassis to provide the highest line density in the industry
- **Shielded RJ-45 Connectors:** In order to minimize inter-channel crosstalk, shielded RJ-45 connectors have been chosen for connections to DUTs
- **30 MHz Bandwidth:** Bandwidth for SHDSL/ ADSL/ ADSL2/ ADSL2+/ ADSL2++ and VDSL2 standard testing
- **Loop Step Size:** Variable from 0 to 1200m in 75m increments and from 1200m to 4950m in 150m increments
- **Simple To Operate:** Ease of use and setup make the DLS 6804 ideal for fast-paced manufacturing and verification multi-line testing
- **Manual And Remote Control Options:** Can easily be integrated into an automated test environment —allowing for control of the system in a customer's own scripting environment. Remote control via RS-232 allows testing to be automated and simplifies operation
- **Premium Accuracy For Production:** Uses technology from DLS 8230 series of VDSL2 lab-grade simulators to provide the most accurate simulator possible at the lowest cost
- **Passive Simulation Components:** Lowest noise floor in production wireline simulation enables greater accuracy

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# DLS 6804 EUROPEAN MULTI-LINE PRODUCTION WIRELINE SIMULATOR

| DLS 6804 SYSTEM SPECIFICATIONS | |
|---|---|
| **Type of Wire** | PE 0.4mm as defined in ETSI TS 101 388 |
| **Number of Lines** | 8- or 12-line options |
| **Reach** | 0, 150m to 4950m |
| **Variable Reach per Line** | 75m increments to 1200m, 150m increments from 1200m to 4950m |
| **Increments** | Variable depending on length setting |
| **Bandwidth** | 20KHz to 30MHz |
| **DC Rating** | 100 VDC Max. Tip-to-Ring |
| **Attenuation (Insertion Loss)** | Typically MAE ‹ 1dB (20KHz to 30MHz) over VDSL2 reach simulation vs. theory |
| **Channel To Channel Crosstalk** | Better than -80dB over frequency band 20KHz to 30MHz |
| **Usable Attenuation Range** | 0 to–90 dB |
| **Impedance** | ± 10% (20KHz - 30MHz) |
| **Control** | Remote control via RS-232 |
| **Connections** | Shielded RJ-45 jacks to minimize crosstalk |
| **Power Supply** | AC Power100 – 130 VAC, 60 Hz or 230/240 VAC (+6/-10%) 50/60 Hz AC to DC adapter |
| **Environmental** | |
| **Operating Temperature** | +10° C to +40° C (50° F to 104° F) |
| **Storage Temperature** | -20ºC to +70ºC (-4ºF to 158ºF) |
| **Cable Reference Temperature** | 22ºC |
| **Humidity** | 90% (non-condensing) max. |
| **Mechanical (Unit comes complete with rack mount brackets.)** | |
| **Weight Per Chassis** | 20kg/45lbs per chassis |
| **Dimensions Per Chassis** | 44 mm x 423 mm x 384 mm (1.75” x 17” x 15”) (H x W x D) (6U height) |

## ORDERING INFORMATION

Trade-in programs are available for existing production wireline simulators. The DLS 6804 can be ordered in different configurations to suit the needs of the production test lab. Contact your Spirent Sales representative for more information.

### Single Chassis Configurations

- PE 0.4mm x 8 lines x 4950 metres (P/N DLS 6804-08)
- PE 0.4mm x 12 lines x 4950 metres (P/N DLS 6804-12)

## SPIRENT GLOBAL SERVICES

Spirent Global Services provides a variety of professional services, support services and education services—all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services Web site at www.spirentcom.com/gs or contact your Spirent sales representative.

**AMERICAS** 1-800-SPIRENT • +1-818-676-2683 • sales@spirent.com

**EUROPE AND THE MIDDLE EAST** +44 (0) 1293 767979 • emeainfo@spirent.com

**ASIA AND THE PACIFIC** +86-10-8518-2539 • salesasia@spirent.com

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