SPIRENT DLS

SPIRENT PHYSICAL LAYER SOLUTIONS

DLS-6900AWGN SINGLE LINE 26AWG/PE04 WIRELINE SIMULATOR

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

The DLS-6900AWGN is a single line production-grade wireline simulator in a compact 2U rack-mountable chassis. It simulates both PE04 and 26AWG cable models in a single chassis.

The frequency range is from DC to 30MHz with a maximum reach of 21kft for 26AWG cable and 7km for PE04mm cable. This makes the DLS-6900AWGN suitable for VDSL2/VDSL/ADSL2++/ ADSL2+/ ADSL2/ADSL and SHDSL production and verification testing.

Unlike most production-grade wireline simulators, the DLS-6900AWGN production-grade simulator also includes an internal white noise generator offering users the ability to inject a range of white noise levels—from -90dBm/Hz to -140dBm/Hz. At a low price point, the DLS-6900AWGN provides users with new options for their development environments including quick and easy desktop DSL testing.

The DLS-6900AWGN provides users with a low cost product that is complementary to our lab-grade quality wireline simulators. With its compact size, support for the two most common cable models for Europe and North America, and the ability to generate and inject basic white noise, the DLS-6900AWGN is ideal for quick desktop development testing, field support and test requirements, or even the manufacturing environment. It is the perfect complement to the portfolio of DLS lab-grade platforms used for testing to the latest DSL standards.

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 leveraged from Spirent's 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

- **30 MHz Bandwidth—**Bandwidth for SHDSL/ ADSL/ADSL2/ ADSL2+/ADSL2++ and VDSL2 standard testing
- **Flexible Multi-Gauge Configurations—**The user can select between 26AWG and PE04mm cable models simply by selecting or de-selecting a front panel push button switch
- **Loop Step Size—**PE04 cable 100m increments from 0 to 7km, 26AWG cable 250ft increments from 0 to 21kft
- **White Noise Capability—**The DLS-6900AWGN includes an AWGN noise source with a range of -90dBm/Hz to -140dBm/Hz adjustable in 0.25dB increments
- **2U Rack-Mountable Chassis—**Compact design makes this unit suitable for developers' or manufacturers' desktops. This small form factor system is easily transportable—making it ideal for field support requirement or even marketing demonstrations.
- **Manual Front Panel And Remote Control Features—** The DLS-6900AWGN can be completely controlled manually from the front panel, users can select the gauge type (26AWG or PE04), length of loop and white noise level. All settings are displayed on the LCD display of the front panel. Alternatively the simulator can be controlled via the serial RS232 port located on the rear panel of the DLS-6900AWGN.
- **Simple to Operate—**Ease of use and setup with functional front panel controls and display

DLS-6900AWGN SINGLE LINE 26AWG/PE04 WIRELINE SIMULATOR

DLS-6900AWGN SYSTEM SPECIFICATIONS	
Type of Wire	26AWG and PE04
Number of Lines	Single line
Reach	26AWG (0-21kft) 250 ft increments, PE04mm (0-7km) 100m increments
AWGN (White Noise injected at both sides)	-90 to -140dBm/Hz with 0.25dB increments
Bandwidth	DC to 30 MHz
DC Nominal Operating Range	50 VDC Tip-to-Ring
DC Loop Current	135mA Maximum
Attenuation (Insertion Loss)	MAE <1dB (50KHz to 30MHz) Typically simulation vs. theory up to 15 Kft. or 4500 m
Front Panel Display	2 row 24 character LCD display
Usable Attenuation Range	0 to–80 dB
Impedance	Typically ±10% (50kHz–30MHz with respect to characteristic impedance)
Control	Remote control via RS-232, Manual control via front panel
Connections	RJ-45 jacks side A and side B
Power Supply	External AC to DC power adapter, 100—240 VAC, 50/60 Hz, provided with the unit
Environment	
Operating Temperature	+10º C to +40º C (50º F to 104º F)
Storage Temperature	-20º C to +70º C (-4º F to 158º F)
Humidity	90% (non-condensing) max
Mechanical (Unit comes complete with rack mount brackets)	
Weight Per Chassis	6.5 kg/14.3 lbs per chassis
Dimensions Per Chassis	(89 x 432 x 333 mm)/(3.5" x 17" x 13.1") (H x W x D) (2U height)

ORDERING INFORMATION

Single Chassis Configuration

- PE04 and 26AWG simulator with AWGN (P/N DLS-6900AWGN)

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.

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