DSL Multiload Attenuator



The DSL Multiload Attenuator is a variable-position, multirange signal attenuator used with DSL test sets that simply works in line with the test leads to attenuate ADSL/ADSL2/2+ signals, thus emulating the effect of cable length upon DSL performance (not a line simulator).

KEY FEATURES

Tests ADSL2+ port performance with technology-specific attenuation (simulated length)

Simulates attenuation of six different lengths and bypass upon ADSL/2/2+ signals

Safe for use at the central office(CO) or at the exchange: no electronics to fail or batteries to replace, no electronic emissions

Light, compact handheld device that is easy to carry anywhere

No special cables required: accepts most common test leads

Easy to operate: intuitive, simple manipulation

APPLICATIONS

CO/exchange dispatch and referral reduction

ADSL port recovery

New DSLAM port verification

DSL performance isolation of cable sections

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AXS-200/635

MaxTester 630

THE MUST-HAVE ACCESSORY TO ENHANCE YOUR xDSL TEST SOLUTION

The DSL Multiload Attenuator enables several money-saving, practical applications: ADSL2+ port performance verification at the CO/exchange or remote DSLAM upon provisioning, surveillance and recovery of DSL ports previously decommissioned, DSLAM port isolation and verification during troubleshooting, and even faulty cable span replacement to verify DSL rate and reach. In each case, it quickly helps isolate the DSL port as a source of trouble, thus reducing repeats and getting to the real problem faster.



Used in combination with EXFO ADSL test sets, the DSL Multiload Attenuator can help reduce CO/exchange dispatches by up to 10% per year, per exchange.

- Positively clears ADSL 2/2+ ports "in", with ADSL capabilities and purpose-built DSL multiload attenuator designed from customer feedback
- > Automatically tests subscriber cables "out", for ADSL 2/2+ specific issues
- > Automatically identifies high-frequency crosstalk that impacts ADSL 2/2+
- > Easy enough for frame techs to use with minimal training, as shown in trial

Key Benefits

- > Reduce CO/exchange repeats by 10% or more per year (eliminate one referral/dispatch per day)
- > Reduce referrals to OSP repair by locating the problem sooner-so it can be fixed sooner
- > Avoid unnecessary CAPEX to add capacity or replace good ports
- > Restore service and customers on as many as 70% of disabled ports, and recapture revenue



Figure 1. Distribution frame



EXFO'S SOLUTION: DSL MULTILOAD ATTENUATOR + AXS-200/635



* Copper testing on pair is required during initial provisioning and troubleshooting.

| OTHER DISPATCH REDUCTION SOLUTIONS | | | | | | | |
|--|-------------------|-------------------|---------------------------|---------------------------|--|--|--|
| Test set | Basic ADSL tester | Cable-only tester | Other "combo" tester | EXFO copper/DSL test sets | | | |
| ADSL 2/2+ testing | \checkmark | | | \checkmark | | | |
| ADSL multiload attenuator | | | | \checkmark | | | |
| Single-ended, automatic cable pair testing | | 2 test sets | Test set + Far End Device | \checkmark | | | |
| Automatic crosstalk ID for ADSL 2/2+ | | 2 test sets | Requires training | \checkmark | | | |
| Single-ended loss/attenuation | | 2 test sets | 2 test sets | \checkmark | | | |
| Single-ended pictorial bridged tap locator | | | | \checkmark | | | |
| Fit for CO/exchange dispatch reduction? | Х | Х | Х | \checkmark | | | |



(1 ⁷/₈ in x 2 ¹/₄ in x 4 ³/₄ in)

(32 °F to 104 °F)

(-40 °F to 158 °F) (-4 °F to 122 °F)

0.23 lb

| TECHNICAL SPECIFICATIONS | | | | | | |
|--------------------------|--------|------------------------------|--|--|--|--|
| R | anges | Typical Rate Uncertainty* | | | | |
| (meters) | (feet) | | | | | |
| 900 | 3000 | 10 % | | | | |
| 2400 | 8000 | | | | | |
| 3000 | 10 000 | | | | | |
| 4000 | 13 000 | 15 % | | | | |
| 5500 | 18 000 | 20 % | | | | |
| 6700 | 22 000 | Not rated | | | | |

* Rate uncertainty based on laboratory environment testing using an Aware StratiPHY3 VDSL2 CO modem and an EXFO AXS-200/635; rate tolerances will vary with other vendor systems and different noise conditions.

| TEST INTERFACES (INPUT/OUTPUT) | | | | | |
|--------------------------------|---|--|--|--|--|
| Interfaces | Description | | | | |
| RJ45 | Ethernet type T&R terminal (pins 4 and 5) | | | | |
| RJ45 | Ethernet type T&R terminal (pins 4 and 5) | | | | |
| Power | Description | | | | |
| Battery | Not required | | | | |
| Power supply | Not required | | | | |
| Voltage Protection | EN-61010-1:2001; EN-60950 sect. 6 | | | | |
| Differential mode | 125 V RMS or 400V DC | | | | |
| Common mode | 1000 V RMS | | | | |

ORDERING INFORMATION

ACC-DSLATNv1 (Correlates to length) ACC-DSLATNv2 (Correlates to common DSL rates)

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GENERAL SPECIFICATIONS

storage (shipping)

storage (long-term)

48 mm x 56 mm x 120 mm

0 % to 85 % non-condensing

0.104 kg

0 °C to 40 °C

-40 °C to 70 °C

-20 °C to 50 °C

Size (H x W x D)

Weight

Temperature operating

Relative humidity

EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

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