

DC-300 MHz switch for balanced 100 Ω twisted pairs automates testing of multiple CPE's & DSLAM ports

xDSL that is using existing copper infrastructure of telephony pairs ... it never stops, and it will continue for the next decades with new technologies like Vplus (35 MHz), Vectoring, Bonding and G.fast (106 MHz - 212 MHz) in combination with legacy SHDSL, ADSL2plus and VDSL2 networks.

xDSL testing though has become a complex matter. Proprietary test plans or Standard test plans like ITU-T based recommendations BBF TR-60, TR-100, TR-114, TR-248, ID-337 .. are forcing the Telecom Operators to run permanently regression tests with test scenario's for different CPE's and different DSLAM chassis. Parallel testing as well as the simultaneous use of test equipment like traffic generators, wireline simulators and noise generators have become a major topic in all DSL labs.

In that respect this new ASM product is an excellent money-saver for anyone who is involved in DSL testing. The ASM 32-8 is a high-end switch for 32 CPE's and 32 DSLAM ports: the CPE DUT and the DSLAM reference port can be automatically selected without patching. Each combination of CPE and DSLAM under test can be expanded with noise injector and noise generator.



TEST ~
COMPARE ~
BENCHMARK ~
CERTIFY ~

Ask for the physical layer test systems of Sparnex Instruments which are compatible with the ASM 32-8

With +35 years of experience in physical layer Sparnex Instruments is a worldwide Reference Competence Center with an unique expertise in characterising and designing high-end test and simulation platforms of all electrical phenomena that affect the physical layer. The Broadband Industry relies on Sparnex Instruments to compare and qualify high-speed modems according Standard Regulations as well as proprietary country and network specific characteristics.

Sparnex Instruments is the ITU-T compliant manufacturer who is 100 % committed to the wireline physical layer testing industry with a full range of DSL test systems that allow the lab manager to integrate, optimize and automate the physical layer test lab. Sparnex Instruments systems make it easy for the Quality and Service Software engineers to test DSL access products according any test scenario on the CPE-DSLAM/DPU combination of their choice.

The **ASM 32-8** is designed for next generation of DSL technologies as it allows impedance, insertion loss and phase neutral switching from DC up to 300 MHz. The unit can be equipped with switching at one end (CPE *or* DSLAM) or with switching at both ends (CPE *and* DSLAM). The 4:1 switch connects 32 CPE's and/or 32 DSLAM ports of which 8 combinations can be used simultaneously. The switch can be expanded with high-impedance noise injectors at CPE side and/or at DSLAM side. The ITU-T compliant noise injectors from 25 KHz to 106 MHz cover all xDSL technologies including the new G.fast high speed (up to 1 Gigabit per second) technology. The ASM 32-8 is the only high-end switch available on the market with such broad frequency range which makes the product the preferred solution of the DSL transmission experts.

Automated Layer 1 switching

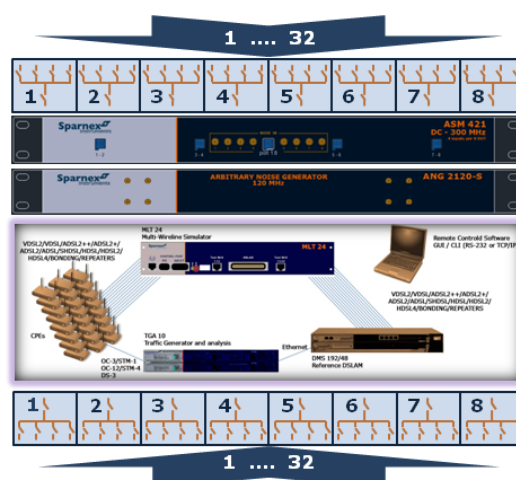
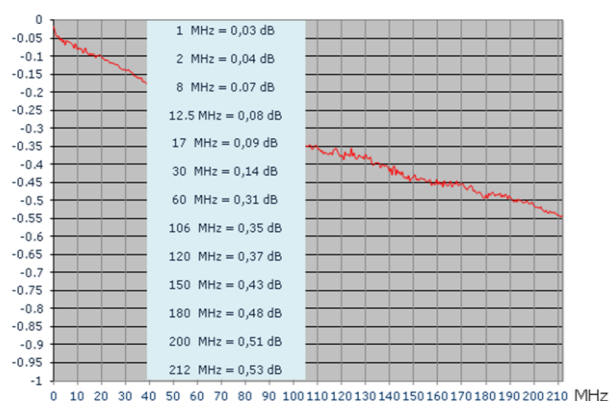
Designed by DSL physical layer experts for DSL products experts



SPECIFICATIONS

- transparent signal switch for DSL wireline balanced 100 Ohm twisted pairs
- 32 CPE and 32 ports DUT DSLAM/DPU in 4:1 groups per CPE-DSLAM devices under test
- 8 bi-directional full symmetric parallel channels allowing for 8 simultaneous tests
- Frequency range 100 Hz to 300 MHz
- extreme low insertion loss
 - < 0,05 dB@ 1 MHz
 - < 0,1 dB@ 17 MHz
 - < 0,35 dB@ 100 MHz
- Tolerance on impedance $\pm 10 \%$
- Tolerance on phase/delay $\pm 1 \%$
- By-pass crosstalk: better than -100 dBm/Hz@10 MHz
- Noise floor < -150 dBm
- Expandable with 8 or 16 High-Impedance noise injectors (ITU-T conform) 25 kHz - 106 MHz
- Compatible with LSX 20xx, VCX, ANG 2xxx, Concept 50 Vectoring,
- Expandable to 16 or 24 Nodes under test (MLT 24, VCX 24 pair Vectoring, Concept 25)
- Remote CLI interface 10-100 base-T
- Compatible with ICL automation scripting, RPG report generator, TSP Test Scenario
- 100 – 140 VAC/50-60 Hz or 200 – 240 VAC/50-60 Hz 1 A
- Housing 19"/2 U height - 5.6 kg
- 2 times 16 ports RJ-45 patch Cat 6e (CPE or DSLAM ports) with HFD shielded interconnection cable
- 8 pair HFD shielded connector to TELCO 50 (MLT 24, VCX n.25)
- 8 pair HFD to HFD shielded interconnect cable (VCX 8) or to shielded RJ-45 female connectors (CPE's)

Insertion Loss



APPLICATIONS

- **Performance testing under equal conditions**
- **Co-existence and regression testing**
- **Interoperability testing**
- **Product design & general functions testing**
- **Production quality testing**

Ordering Information

ASM 32-8:

Automated scripts:

Part number

95.30.3208

on demand