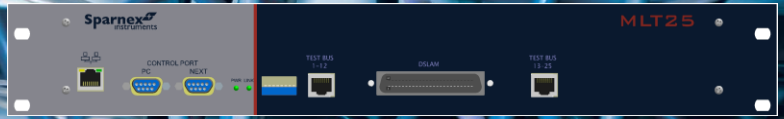


Automated simultaneous testing of xDSL modem CPE or DSLAM-ports



Cost effective solution for guaranteeing production quality of xDSL devices, also suitable for verifying software updates, interoperability tests and regression tests.

BENEFITS

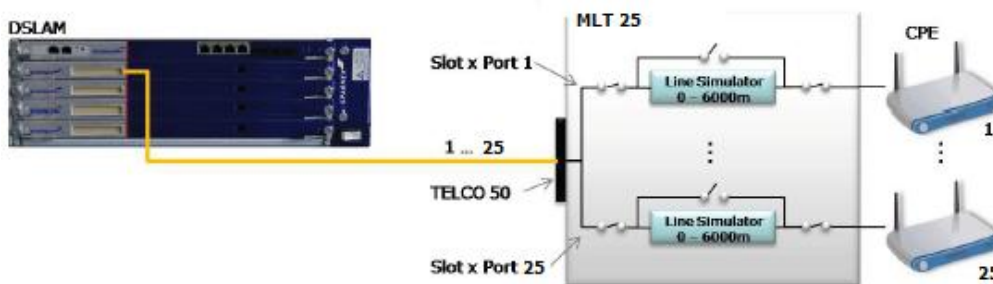
The MLT25 is a multi-channel line attenuator for 25 ports with integrated port access switching. The software is compatible with the popular MLT24 and the LISI units that use the same control software.

The MLT25 provides unsurpassed automation capabilities to your volume production testing. While popular for production testing, the MLT can also serve as an excellent reference device for xDSL interoperability and regression testing.

Each port can simulate up to 6 km (19,500 ft) of 26 AWG or 0,4 mm cable.

The MLT is provisioned in either a stand-alone or 19" subrack version and includes the system controller and a PC interface for automated testing.

31 units can be cascaded providing up to 775 making the MLT very suitable for high volume quality inspection. MLT is the market reference test that is used to label the quality of xDSL modems and DSLAM blades during and after production.



The MLT25 is equipped with the industry standard TELCO 50 connector that allows to control all 25 ports simultaneously with automated scripts per each channel independently.

2 extra output ports (1 per 12 ports) allow for connection to a high-end xDSL line simulator like LSX 2030 V that can be used as part of a repair or performance test bank when a node under test would fail, or for more extensive in-depth sample testing.

The internal switching allows for 'group testing' of a number of nodes against one reference node (CPE or DSLAM/DPU). This unique feature turns the 25 port line-simulator also in a switch that allows for faster, more economical and fully automated testing.

APPLICATIONS

ADSL - ADSL2
ADSL2plus
VDSL - VDSL 2
SHDSL
Profile 35b
Bonding
Repeaters

LOAD TEST

- set attenuation
- set micro-interrupt
- check working
- check robustness
- check speed
- check functions

GRAPHICAL GUI

An (optional) GUI allows for manual configuration of all features per channel

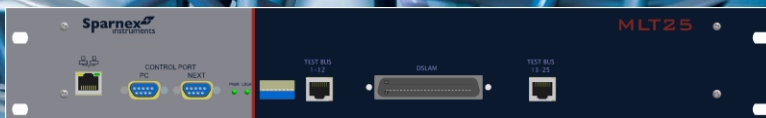
REMOTE CONTROL

All features can be programmed with CLI-Ethernet port

PRODUCTION TESTING

A best-in-class reference test bank for parallel massive volume testing in a production site with qualified & accurate repeatable tests and test results.

Automated simultaneous testing of xDSL modem CPE or DSLAM-ports



Expansion of MLT25 test platform

The input of each channel can be combined with ASM 421. This unit is expanding 24 channels into 96 channels with a 4 : 1 input ports selection per channel (ASM 421) that creates a test bed of 96 configurable CPE ports and 96 DSLAM/DPU ports.

It is possible to unlock the port-to-port connection by adding the VCX n.8 Matrix (8 x 8) that allows for an any-to-any combination configuration of ports.

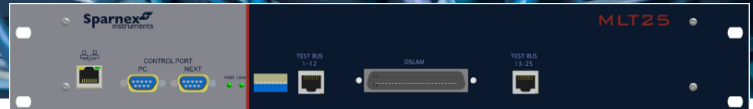
The MLT25-S/G.f is a dedicated G.fast test system (106/212 MHz) that is configurable so that when performing 'a fast test', a single line is programmed for each channel in the MLT. In case of 'intensive testing', then multiple attenuation values per channel can be configured consecutively in an automated fashion.

Sparnex Instruments has a range of high-end line simulators known under the product-group names 'DLA', 'LSX', and 'PLS' for wireline transmission devices, coaxial transmission devices, and AC power line devices that allow for accurate and repeatable product performance testing according Standards of different Standardisation bodies like ITU-T, IEEE and others.

Features

- **Up to 6 km line length per port, in steps of 400 m**
- **From DC to Profile 35b (5 kHz - 35 MHz)**
- **Constant Insertion loss with repeatable results**
- **Cascading up to 31 units**
- **Randomized micro-interrupts per port**
- **Select any of the input ports**
- **Select any of the output ports**
- **Switch to reference port**
 - switch any of the first block of 12 channels to one Reference Port
 - concurrently switch any of the 2° block of 12 channels to another Reference Port
- **Group channels into output ports with**
 - 1 group of 24 inputs to 1 output (24:1)
 - 2 groups of 12 inputs to 2 outputs (12:2)
 - 3 groups of 8 inputs to 3 outputs (8 : 3)
 - 4 groups of 6 inputs to 4 outputs (6 : 4)

Automated simultaneous testing of xDSL modem CPE or DSLAM-ports



SPECIFICATIONS

Datasheet

FUNCTIONAL

- Single signal path per channel - equipped with 25 channels
- symmetrical in 400 m stepsize per channel
- Expandable to 775 channels / Nodes under test
- Cascaded system topology up to 31 MLT25 units
- One-by-one group testing to one reference port
- External port towards repair test bank or performance test bank
- micro-interrupts per channel
- expandable with ASM 421 for 4 selectable input ports per channel to 1 Node under test
- Remote CLI interface 10-100 base-T / Telnet sessions

ELECTRICAL

- Frequency range 5 kHz to 35 MHz
- Line type attenuation acc. 26 AWG or 0,4 mm
- Accuracy line curve $\pm 10\%$ @10 Mhz
- Impedance 100 Ohm twisted pair, balanced
- Accuracy impedance $\pm 10\%$
- Return loss >15 dB
- Noise floor < -150 dBm
- Input signal < 20 dBm

CONNECTORS

- Node-under-test connection: TELCO 50 (both sides CPE and DSLAM/DPU blades)
- External port to repair or performance test bank: 2 times RJ-45 in/out
- CLI: RJ-45 Ethernet 10/100 base-T / RS-232 subD 9
- cascaded MLT25 units: RS-232 to RS-232
- monitor: RJ-45
- unit identification: selectable dip-switch

POWER

- 100 – 140 VAC/50-60 Hz or 200 – 240 VAC/50-60 Hz 1 A

MECHANICAL

- 250 x 15 x 300 mm desktop or 19" mounted (19" brackets are standard)
- 19" format 2 U (or HE) stackable
- weight: 2,9 kg

ORDERING INFORMATION

MLT25 unit:	91.57.2244
Extension MLT25:	91.57.2245
MLT25 naar 19" patch 25 RJ-45:	23.03.1201
Connector MLT25:	10.70.5010
Automation Scripts:	on demand
Graphical User Interface MLT25:	60.31.2102

MLT 25

25 channel xDSL test bank

Automated simultaneous testing of xDSL modem CPE or DSLAM-ports



<u>Nr.</u>	<u>Part Nr</u>	<u>Part Name</u>		<u>Picture</u>
1	91.57.2111	MLT25 220/110V Power Adapter	1	
2a	23.01.0013	Mains Cord [Europe 230VAC] [STANDARD DELIVERY]	1	
2b	23.01.0014	Mains Cord [USA 110VAC]	Optional	
2c	23.01.0016	MAINS CORD [UK TYPE]	Optional	
3	18.18.1002	25 Port RJ-45 Patch Panel	Optional	
4	23.03.0143	TELCO 50 (MLT) – 25 Port RJ-45 patch panel cable	Optional	
5	23.08.0002	RS-232 Cable	Optional	
6	23.08.0017	RS-232 Cable (Male-Male) Multiple MLT 25 connections	Optional	