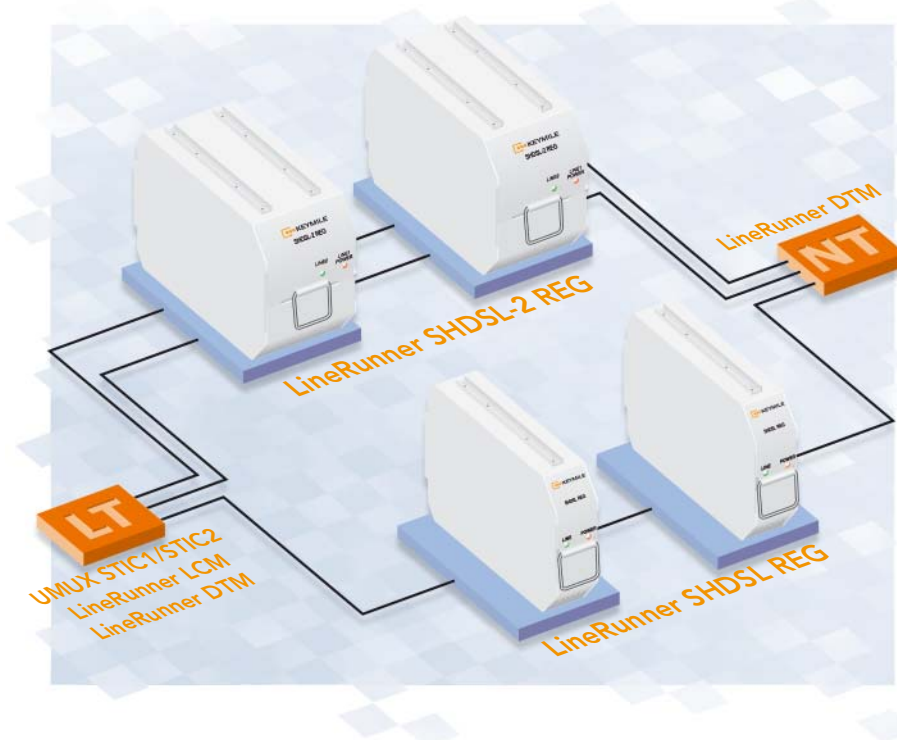


# LineRunner SHDSL REG

SHDSL Regenerators for UMUX and LineRunner



- Regenerators for 1-pair and 2-pair transmission systems
- Up to 2 regenerators per transmission route
- Local or remote power supply
- Performance monitoring according to ITU-T G.826
- Regenerator housings for indoor, outdoor, wall, pole, and underground installation
- Management via ASMOS, UNEM or SNMP

LineRunner SHDSL REG and SHDSL-2 REG regenerators were developed for implementation on UMUX or LineRunner SHDSL transmission routes. You can employ up to two regenerators per transmission route consecutively. This way you double or even triple the range in comparison to standard SHDSL systems.

## ■ Data Transmission

The regenerators transmit data using the SHDSL (Single-Pair High-Speed Digital Subscriber Line) transmission procedure according to ITU-T G.991.2.

The regenerators support rate-adaptive transmission. The data rate is adjusted automatically via the LT module (LT = Line Termination). Additional configuration of the regenerators is not required.

## ■ Power Supply

The regenerators can be supplied locally or remotely from the LT or NT module (NT = Network Termination). This allows for flexible implementation of regenerators – even in locations where a power supply is not available.

The LT module of a transmission route can generate a wetting current that is passed through the regenerators to protect all contacts of a transmission route from corrosion.



Remote supply and wetting current in a SHDSL transmission system

### ■ Management

The regenerators are integrated into the management systems of the transmission system employed. Whether you use UNEM (for UMUX), ASMOS (for LineRunner) or SNMP: Extensive performance data according to ITU-T G.826 are available.

Performance data is collected at both transmission interfaces

of the regenerators providing comprehensive monitoring of transmission quality.

### ■ Installation

For versatile conditions at the installation sites different housings are available that assist you to integrate regenerators simple and cost-effective into the system.

- LineRunner COD:  
For outdoor installation



- LineRunner CID:  
For indoor installation



- LineRunner CUG:  
For underground installation



- LineRunner CUG1:  
For underground installation



## Technical Data

Regenerators				
Line code	16 TC-PAM according to ITU-T G.991.2			
Payload data rate	n x 64 kbps duplex via 1 or 2 copper pairs, n = 1 ... 32			
Transmission rate	n x 64 kbps duplex via 1 or 2 copper pairs, n = 3 ... 32			
Supported regenerators per route	Up to 2			
Power supply	39 ... 72 VDC, remotely supplied			
Ambient temperature (operation)	-25 °C ... +55 °C			
Relative humidity (operation)	10% ... 95% (non condensing)			
Regenerator Housings	LineRunner CID	LineRunner COD	LineRunner CUG	LineRunner CUG1
Installation site	Indoor	Outdoor	Underground	Underground
Dimensions (H x B x T) in mm	215 x 165 x 245	380 x 220 x 110	295 x 185 x 350	430 x 178
Maximum equipment	2 x 1-pair or 1 x 2-pair	2 x 1-pair or 1 x 2-pair	4 x 1-pair or 2 x 2-pair	2 x 1-pair or 1 x 2-pair
IP code	IP21	IP54	IP68	IP68
Miscellaneous features	–	Lockable	Pressure-tight up to 10m water column, incl. 9m conn. cable	5m conn. cable



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