

LineRunner SHDSL DTM

Modular CPE for SHDSL transmission and effective provisioning of TDM data services



LineRunner SHDSL DTM, DTM-M and optional application interfaces

- l application interfaces
- LineRunner SHDSL DTM offers a professional solution for the delivery of business data services, with bandwidths of up to 4.6 Mbps. With a modular design and a wide range of interfaces it is a cost effective and flexible solution that can be used to meet specific customer requirements.

The CPE can be powered locally or remotely. Depending on the application, the transmission range can be extended with the installation of up to two regenerators.

LineRunner SHDSL DTM

LineRunner SHDSL DTU terminates SHDSL TDM lines at the end customer. The CPE can be operated in the following applications:

- □ CPE for MileGate The CPE is the NT for the MileGate SHDSL TDM line card STIM1.
- □ CPE for UMUX

 The CPE is the NT for the

 UMUX SHDSL TDM line cards

 STIC1 and STIC2.
- Desktop-Desktop operation
 With the CPE you can realise single point-to-point lines

- SHDSL transmission with up to 4.6 Mbps
- Wide range of application interfaces: G.703/G.704, X.21/V.11, V.35, V.36, V.24/V.28, 10/100BaseT
- Sub bit rates are supported
- 1 and 2 pair transmission (option)
- CPE for MileGate STIM1, UMUX STIC1/STIC2 or for desktop-desktop operation
- Remote power feeding (option)
- Integrated in the network management system UNEM and ASMOS

Application interfaces

The CPE offers a variety of application interfaces, besides standard data rates (n x 64 kbps) so-called sub bit rates (<64 kbps) are supported.

LineRunner SHDSL DTM provides a G.703/G.704 application interface (120 ohms). Using optional plug-in modules the unit can easily be equipped with any other application interface.





LT/NT configuration

LineRunner SHDSL DTM desktops can be deployed as network termination (NT) units in customer premises. The LineRunner SHDSL DTM configuration can be changed from NT to LT using a switch. This allows the LineRunner SHDSL DTM to act as an LT module for single desktopdesktop routes.

Housing

A robust plastic housing (DTM) or a metal housing (DTM-M) are available as housing versions. Using optional mounting angles you can mount the DTM-M in 19" or ETSI racks (1 HU height).

■ Rate adaptive

Application and transmission data rates between the LT and NT can be adjusted via the management software. The SHDSL transmission rate can be configured as n x 64kbps.

Remote power feeding

As a variant LineRunner DTM can be equipped with a remote power supply module. Each remote supply module can power one unit (REG or NT).

Management

All modules can be managed via LineRunner ASMOS. NTs connected to MileGate or UMUX as a CPE are managed via UNEM/ MCST/UCST.

Technical data

SHDSL Interface		
Line code	16 TC-PAM according to ITU-T G.991.2 Annex B	
Transmission rate	192 kbps 2048 kbps with STIM1/STICx	
	192 kbps 4608 kbps in desktop-desktop operation	
Supported regenerators	1 pair or 2 pair regenerators (up to 2 per route)	
Remote supply (option)	<115 VDC according to EN 60950, 75 mA	
Wetting current	Typical 2 mA, max. 10 mA (according to ITU 991.2)	
Storage of performance data (LT side)	96 x 15 minutes and 7 x 24 hours	
Application Interfaces		
Fixed application interfaces (connector type)	G.703/704, 120 ohms (RJ 45)	
Optional application interfaces (connector type)	G.703/704, 75 ohms (BNC), X.21/V.11 (DSub-15), V.35 (MF-34), V.36 (DSub-37), V.24/V.28 (DSub-25), Ethernet (RJ 45)	
Payload data rate	n x 64 kbps, n = 1 32 (1 2 with V.24/V.28)	
Payload data rate (sub rates, according to ITU-T V.110)	600, 1200, 2400, 4800, 9600, 19200, 38400, 48000, 56000 bps	
Ethernet Specifications		
Ethernet modes	10FX, 10HX, 100FX, 100HX, auto-negotiation	
Ethernet data rate	384 kbps 4608 kbps	
Design	1 port bridge or 4 port switch	
Transmission Ranges (1 Pair/2 Pair without Noise)	Ø 0.4 mm	Ø 0.8 mm
n=3	7.5 km/-	19.8 km/-
n=6	5.8 km/7.5 km	16.5 km/19.8 km
n=16	4.9 km/5.7 km	12.0 km/15.4 km
n=32	4.1 km/4.9 km	9.4 km/12.0 km
Remote Power Feeding Range	Ø 0.4 mm	Ø 0.8 mm
LineRunner DTM without MOD/with MOD G.703A NT	5.5 km	22.1 km
LineRunner DTM without MOD/with MOD G.703A NT	4.5 km	17.9 km
LineRunner DTM with MOD V.35	4.1 km	16.3 km
Dimensions (H x W x D) and Weights		
LineRunner SHDSL DTM	50 x 295 x 225 mm, ca. 500 g	
LineRunner SHDSL DTM-M	44 x 265 x 190 mm, ca. 2600 g	
Power Supply		
AC variant	88 264 V (47 63 Hz), remote power feeding	
AC Validit	38 60 V, remote power feeding	
DC variant		
		depending on configuration and application interface)
DC variant	2.7 W 10.5 W (

