

MileGate TUGE1

TUGE1 offers legacy G.703 64kbps interfaces for dedicated networks



- 8 x 64kbps for data interfaces in line with ITU-T G.703
- Interoperable with
 - UMUX GECOD units
 - XMP1 sub-module G.703, co-directional
- Supports LTP and SNCP/I redundancy functions
- For MileGate 2510 and 2310
- Fanless operation possible
- All functions via one network management system

MileGate TUGE1

TUGE1 integrates 64 kbps interfaces in the MileGate platform. Thus, 64 kbps data devices, such as routers and teleprotection terminals, that are in line with the standard can be connected. With TUGE1 the in dedicated networks common TDM services can be supplied furthermore via the IP-based MileGate platform.

The TUGE1 data can be switched with other 64kbps services in MileGate and multiplexed to higher TDM hierarchical levels.

Data interfaces

TUGE1 provides eight co-directional 64 kbps interfaces according to ITU-T G.703.

These can be transported via all transmission technologies provided by the MileGate platform. As a result, the 64kbps interfaces can be offered in a purely Ethernet backbone and in TDM networks.

■ Redundancy functions

TUGE1 supports different redundancy functions in order to achieve maximum availability of

the services. These functions ensure that the services provided are still available even if part of the network fails:

- □ Network protection: 1+1 Linear Trail Protection
- 1+1 inherently monitored Subnetwork Connection Protection (SNCP/I)
- Flexible transmission

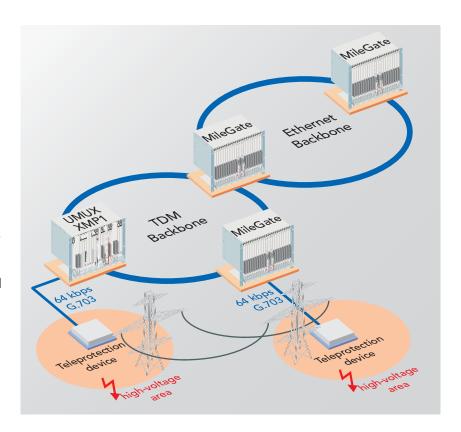
The TUGE1 data can be forwarded via the various transmission technologies provided by MileGate:





- □ via PDH networks
- □ via SDH networks
- □ via Ethernet networks with circuit emulation
- □ via SHDSL paths
- One single management system

The management of TUGE1 and other functions are integrated in the MCST/ECST/UNEM management system. Just one single element manager for all types of service speeds up the job control process. This powerful and easy-to-use element manager offers efficient OAM&P (Operation, Administration, Maintenance and Provisioning) and lower running costs.



Technical Data

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Interface	
Number of interfaces	8
Type of interface	G.703, 64 kbps co-directional
	One wire pair per transmission direction
Front connector type	DIN 41612
Line impedance	120 ohm symmetrical
Standards	
ITU-T standard	G.703 (11/2001)
ETSI	ETSI EN 300 417-5-1 V1.2.1 (2001-10)
	ETSI EN 300 417-2-1 V1.2.1 (2001-10)
	ETSI EN 300 417-1-1 V1.2.1 (2001-10)
	EN 300 166 V1.2.1 (2001-09)
Performance monitoring	According to ITU-T G.826
Further Features	
Protection functions	1+1 Linear Trail Protection
	1+1 inherently monitored Subnetwork Connection Protection (SNCP/I)
Switching time	<50 ms
Further Hardware Information	
MTBF	109 years at 35 °C
TDM bus access	4 x P12
Management	
ECST/MCST	For local management
UNEM	For central management
Power Supply	
Input voltage nominal (min/max)	-48/-60VDC (-39.5VDC72VDC)
Operation Environment	
Temperature range and humidity	According to MileGate environmental specifications

