



Compact 22 Mbit/s network terminals and multiplexers

FlexiNT-GS devices provide different ways of deploying Ethernet, TDM and low speed serial data services over SHDSL.bis local loops or TDM networks.

They deliver services over local loop using SHDSL.bis line code with speeds of up to 5.7 Mbit/s over a single copper pair. With bonded SHDSL.bis, it is possible to deliver 22.8 Mbit/s split over four copper pairs.

FlexiNT-GS devices can be used as TDM multiplexers or interface converters where serial, Ethernet and E1 interfaces can be converted or multiplexed to an E1 interface.

FlexiNT-GS devices can also work in a box-to-box configuration and act as a network terminal (Customer Premises, CP mode) and a line terminal (Central Office, CO mode).



FlexiNT-GS Lite is a modernized version of the standard FlexiNT-GS network terminal and multiplexer that provides all of the most requested interfaces.

FlexiNT-GS T80030.01 FlexiNT-GS Lite T80030.02

In addition, FlexiNT-GS devices can function as a network terminal for DSL Access Multiplexer (DSLAM) and carry Ethernet over local loop using EFM or ATM mode.

Interfaces

- Two serial interfaces; SSC connector; can be configured for V.11, X.21, V.35 and V.28
- One RS485 interface; RJ-45
- Two E1 TDM interfaces; RJ-45; one E1 can be used for trunk in TDM mux application
- Two Fast Ethernet interfaces
- Ethernet over EFM or ATM
- Ethernet over TDM encapsulation *)
- One local management interface; RJ-45; serial V.11 or V.28
- One line interface; RJ-45; SHDSL/SHDSL.bis;
 1, 2, 3 or 4 pair operation
 - Support for EFM and ATM encapsulation for Ethernet applications.
 - EFM and ATM dual bearer modes for simultaneous transport of TDM and Ethernet.
 - TDM mode for legacy TDM based SHDSL equipment; interoperating with Nokia legacy equipment, for example, ACL2i and DNT2Mi.

Management

FlexiNT-GS devices use open SNMP MIB for fault management (SNMP V2c). The MIB can be easily compiled to any third party SNMP management system. The FlexiNT-GS Private MIB can be made available on request.

Q1 protocol for fault and performance management is supported in order to be compatible with legacy TDM management systems.

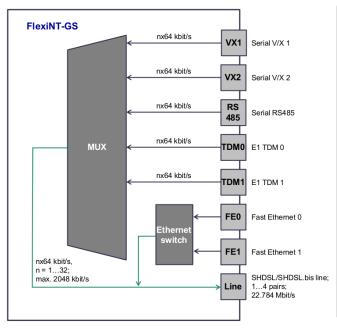
Configuration and performance management is handled using Command Line Interface (CLI). The CLI can be accessed locally by using serial interface (called LMI) or by using Telnet via an Ethernet port of the FlexiNT-GS device. With Telnet you can also access remote FlexiNT-GS's using IP protocol.

Dedicated VLAN can be configured to the device in order to isolate management traffic from payload.

^{*)} Only in standard FlexiNT-GS T80030.01.

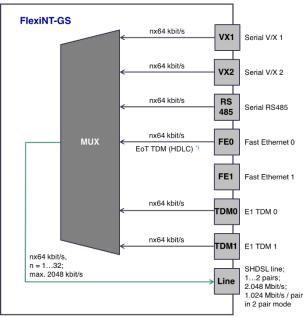
Application examples

Ethernet and TDM over SHDSL/SHDSL.bis line; EFM or ATM dual bearer mode



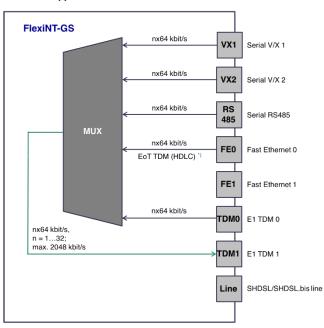
TDM over SHDSL line; legacy mode;

1 Mbit/s / 2 Mbit/s line rates; compatible with ACL2i and DNT2Mi



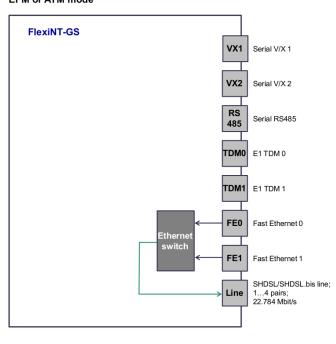
" EoT TDM (HDLC) not featured in FlexiNT-GS Lite.

TDM MUX application



*) EoT TDM (HDLC) not featured in FlexiNT-GS Lite.

Ethernet over SHDSL/SHDSL.bis line; EFM or ATM mode





Technical data

| FlexiNT-GS - FlexiNT-GS Lite - Technical data | | |
|---|--|--|
| Serial V/X interfaces | 2 x SSC; V.11/X.21/V.35/V.28; sync/async; V.110 and nx64 kbit/s | |
| Serial RS485 interface | 1 x RJ-45; async; V.110; sampling nx64 kbit/s | |
| E1 TDM interfaces | 2 x RJ-45; symmetrical 120 ohm; G.703/G.704 | |
| Fast Ethernet interfaces | $2 \times RJ-45;10/100Base-T;$ full/half duplex/auto negotiation; EoT | |
| Line interface | 1 x RJ-45; 14 pairs; SHDSL/SHDSL.bis | |
| Local management interface | 1 x RJ-45; V.11 or V.28 | |
| Mechanical construction | Standalone box | |
| Width x height x depth | 280 x 32 x 160 mm | |
| Weight | 1.3 kg | |
| Mounting | Wall and rail mounting | |
| Operating power | 40.557 VDC; AC with AC/DC converter | |
| Power consumption | 9 W | |
| MTBF | 54 years | |
| Environmental and safety | | |
| Indoor application | IP21 (Ingress Protection 21) | |
| Transport | ETSI ETS300019-1-2 class 2.3 | |
| Storage | ETSI ETS300019-1-1 class 1.2 | |
| Operation | ETSI ETS300019-1-3 class 3.3 | |
| Operating temperature range | -25+55 °C | |
| EMC | EN 300 386 V1.6.1:2012 | |
| Safety | IEC 60950-1:2005 (2nd Edition) | |
| AC power supply | Surge protection: 2kV according to ITU-T Rec. K.45 | |
| DC power supply | Surge protection: 1.0kV according to EN61000-4-5 | |
| Line interface | Surge protection: 1.5kV according to ITU-T Rec. K.45 600V RMS common mode according to ITU-T Rec. K.45 | |



Product codes

| FlexiNT-GS – FlexiNT-GS Lite – Accessories - Product codes | | |
|--|---|---|
| T80030.01 | FlexiNT-GS Network Terminal and Multiplexer | Includes HW, SW, DC power connector and cord, grounding wire, cable ties (3 pcs) and line cable; SW license to be ordered separately. |
| T80030.02 | FlexiNT-GS Lite Network Terminal and Multiplexer | Includes HW, SW, DC power connector and cord, grounding wire, cable ties (3 pcs) and line cable; SW license to be ordered separately. |
| L80130.02 | FlexiNT-GS SW license for all interfaces | FlexiNT-GS SW license covering all interfaces (Serial V/X 1, Serial V/X 2, Serial RS485, Fast Ethernet 0, Fast Ethernet 1, TDM 0, TDM 1). |
| Optional power items | | |
| U65693.03 | AC power unit | Packed with FlexiNT-GS terminal. One of the below mains cords to be ordered separately. |
| U65693.04 | AC power unit (packed) | When ordered as a spare. One of the below mains cords to be ordered separately. |
| U62721.01 | Mains cord IEC320-C7 EU | |
| U62721.02 | Mains cord IEC320-C7 UK | |
| U62721.04 | Mains cord IEC320-C7 AUS | |
| U80501.01 | AC power unit holder | |
| U80501.02 | AC power unit holder, 5 pcs (packed) | |
| Other optional items | | |
| U64320.01 | Management cable (PC RJ-45/D9F 3M EMC) | Serial LMI RS-232 cable |
| U80503.01 | Wall and rail mounting | Wall and rail mounting bracket |
| U80503.02 | Wall and rail mounting, 5 pcs (packed) | Wall and rail mounting brackets |

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