



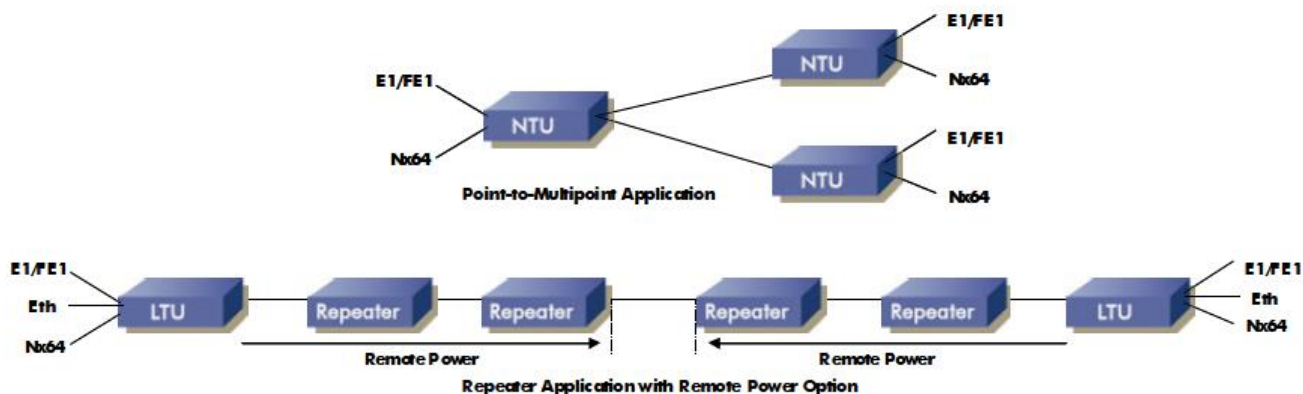
Features:

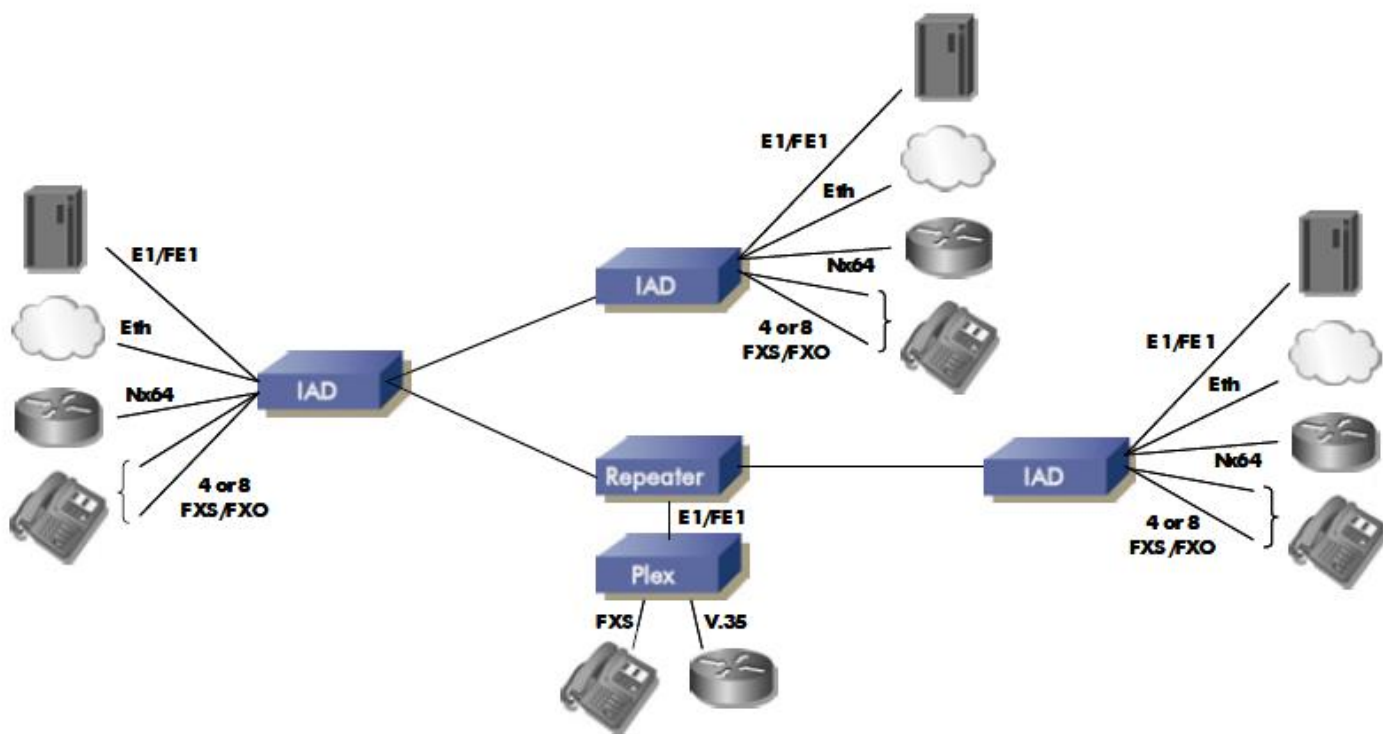
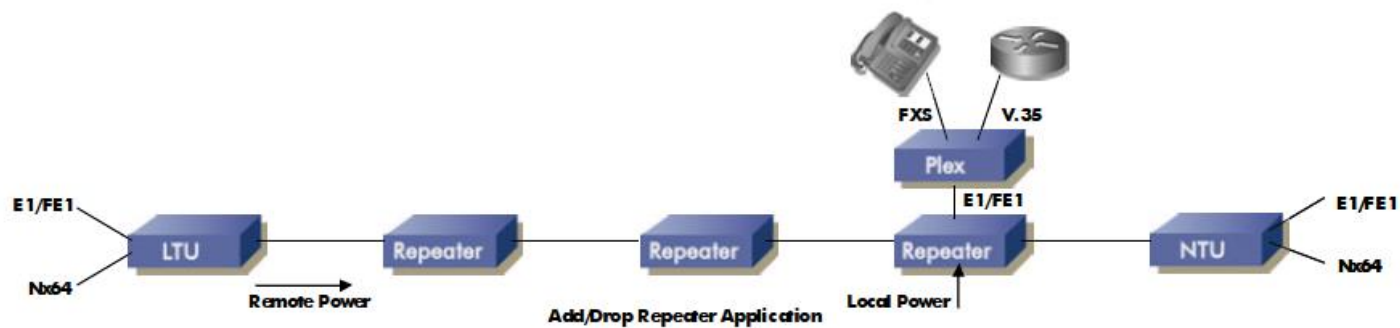
- 2 and 4 Wire SHDSL (TC-PAM16)
- Up to 2.3Mbps
- E1 (G.703/704, balanced/unbalanced)
- Nx64 (V.35, V.36, X.21, V.24)
- Ethernet Bridge (10/100BaseT)
- 4 or 8 Analog Voice Ports (FXS, FXO)
- Multi-Service Operation
- Point-to-Point and Point-to-Multipoint
- Console Port, Telnet, Web, SNMP Management
- Local and Remote Power Support
- Repeater/Regenerator Support

◆ Description:

Ittelecom includes a wide range of SHDSL modems targeted to meet both typical carrier applications as well as access network needs. Ittelecom modems are based on industrial components and manufactured according to highest quality standards providing additional value due to extended temperature range and high reliability. Supporting E1 (G.703/704) with a choice of 120 Ohm balanced or 75 Ohm unbalanced, the Ittelecom 1 SHDSL modem additionally offers a universal Nx64 interface that can be adapted to V.35, V.36, X.21 and even V.24 (RS232) interfaces.

The Line Termination Unit (LTU) even supports Ethernet bridging by presenting a 10/100BaseT Ethernet interface. E1 as well as Nx64 and Ethernet interfaces can be operated simultaneously by easy software configuration. Both, NTU and LTU can be configured to operate either in master or slave mode providing maximum flexibility. While the LTU offers the opportunity to remotely power the NTU over the SHDSL line, it even has the ability to remotely power additional Ittelecom SHDSL repeaters. Optional Point-to-Multipoint support allows not only simple Point-to-Point campus applications, but also provides the opportunity to serve two different sites from one single Ittelecom modem. With an analog voice port extension (FXS/FXO) the Ittelecom modems can easily be upgraded to a comprehensive Integrated Access Device (IAD) for complete, easy, and reliable voice and data convergence. The Ittelecom series is available in various types of housings and mechanics, not only for office use, but also for industrial environments.





Complex Integrated Access Device Application

◆ Technical Parameters :

<ul style="list-style-type: none"> • ITT-PAM-SAN-E1B, V31 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x E1 (120 Ohm) ➤ Power: -48VDC, accepts local and remote power ➤ Physical Interfaces: DB15 (E1), RJ45 (SHDSL), Molex (Power), DB9 (Management) ➤ Management: Console Port, Telnet and limited SNMP via TCU ➤ Power Supply: Not Included (option ITT-PAM-PA48x) ➤ Special Version: ITT-PAM-SAN-E1U, V31 offers E1 75Ohm BNC
<ul style="list-style-type: none"> • ITT-PAM-SAN-N64, V33 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x Nx64 (V.35, V.36, X.21, V.24) ➤ Power: -48VDC, accepts local and remote power ➤ Physical Interfaces: DB25 (Nx64), RJ45 (SHDSL), Molex (Power), DB9 (Management) ➤ Management: Console Port, Telnet and limited SNMP via TCU ➤ Power Supply: Not Included (option ITT-PAM-PA48x) ➤ Remarks: Requires adapter cable (V.35, V.36, X.21, V.24)
<ul style="list-style-type: none"> • ITT-PAM-SAN-E1B/N64, V32 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24) ➤ Power: -48VDC, accepts local and remote power ➤ Physical Interfaces: DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), Molex (Power), DB9 (Management) ➤ Management: Console Port, Telnet and limited SNMP via TCU ➤ Power Supply: Not Included (option ITT-PAM-PA48x) ➤ Remarks: Requires adapter cable (V.35, V.36, X.21, V.24) ➤ Special Version: ITT-PAM-SAN-E1U/N64, V32 offers E1 75Ohm BNC
<ul style="list-style-type: none"> • ITT-PAM-SAN-E1B/N64-MP, V34 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 2 (Multi-Point) ➤ Interface: 1x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24) ➤ Power: -48VDC, accepts local and remote power ➤ Physical Interfaces: DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), Molex (Power), DB9 (Management) ➤ Management: Console Port, Telnet and limited SNMP via TCU ➤ Power Supply: Not Included (option ITT-PAM-PA48x) ➤ Remarks: Requires adapter cable (V.35, V.36, X.21, V.24) ➤ Special Version: ITT-PAM-SAN-E1U/N64-MP, V34 offers E1 75Ohm BNC

• **ITT- PAM-SAN-
E1B/N64/Eth/FXx, V37**

- **DSL Version:** SHDSL
- **Modulation:** TC-PAM16
- **Data Rate:** 64kbps - 2.3Mbps
- **Copper Pairs:** 1
- **Modes:** Master / Slave
- **Interface:** 1x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT),
- **Power:** -48VDC, accepts local and remote power
- **Physical Interfaces:** DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), Molex (Power), 1x DIN41612D (Voice), DB9 (Management)
- **Management:** Console Port, Telnet and limited SNMP via TCU
- **Power Supply:** Not Included (option ITT-PAM-PA48x)
- **Remarks:** Requires adapter cable (V.35, V.36, X.21, V.24)
- **Optional 8x RJ11 adapter for voice interface (ITT-IAD-8V)**
- **Special Version:** ITT-PAM-SAN-E1U/N64/Eth/FXx, V37 offers E1 75Ohm BNC

• **ITT- PAM-SA2N-
E1B/N64/Eth/FXx-MP,
V42SA**

- **DSL Version:** SHDSL
- **Modulation:** TC-PAM16
- **Data Rate:** 64kbps - 2.3Mbps
- **Copper Pairs:** 2 (Multi-Point)
- **Modes:** Dual Master / Single Slave
- **Interface:** 2x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT), 4x or 8x FXO or FXS
- **Power:** -48VDC, accepts local and remote power
- **Physical Interfaces:** DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), Molex (Power), 1x DIN41612D (Voice), DB9 (Management)
- **Management:** Console Port, Telnet and limited SNMP via TCU
- **Power Supply:** Not Included (option ITT-PAM-PA48x)
- **Remarks:** Requires adapter cable (V.35, V.36, X.21, V.24)
- **Optional 8x RJ11 adapter for voice interface (ITT-IAD-8V)**
- **Special Version:** No E1 75Ohm Version available

• **ITT- PAM-SA2N-
E1B/N64/Eth/FXO-MP-
RP, V42M**

- **DSL Version:** SHDSL
- **Modulation:** TC-PAM16
- **Data Rate:** 64kbps - 2.3Mbps
- **Copper Pairs:** 2 (Multi-Point)
- **Modes:** Dual Master / Single Slave
- **Interface:** 2x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT), 4x or 8x FXO only
- **Power:** -48VDC, remote power source, accepts local and remote power
- **Physical Interfaces:** DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), Molex (Power), 1x DIN41612D (Voice), DB9 (Management)
- **Management:** Console Port, Telnet and limited SNMP via TCU
- **Power Supply:** Not Included (option ITT-PAM-PA48x)
- **Remarks:** Requires adapter cable (V.35, V.36, X.21, V.24)
- **Optional 8x RJ11 adapter for voice interface (ITT-IAD-8V)**
- **Special Version:** No E1 75Ohm Version available

<ul style="list-style-type: none"> • ITT- PAM-SRL-E1B, V25 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x E1 (120 Ohm) ➤ Power: -48VDC, local power ➤ Physical Interfaces: DB15 (E1), RJ45 (SHDSL), DB9 (Management) ➤ Management: Console Port, Telnet and SNMP via TCU ➤ Power Supply: Not Included (ITT-ACU-SR, optional ITT-TCU-SR) ➤ Special Version: ITT-PAM-SRL-E1U, V25 offers E1 75Ohm BNC
<ul style="list-style-type: none"> • ITT- PAM-SR2L-E1B-MP-RP, V36 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 2 (Multi-Point) ➤ Modes: Dual Master / Dual Slave ➤ Interface: 2x E1 (120 Ohm) ➤ Power: -48VDC, remote power source, local power ➤ Physical Interfaces: DB15 (E1), RJ45 (SHDSL), DB9 (Management) ➤ Management: Console Port, Telnet and SNMP via TCU ➤ Power Supply: Not Included (ITT-ACU-SR, optional ITT-TCU-SR) ➤ Special Version: ITT-PAM-SR2L-E1U-MP-RP, V36 offers E1 75Ohm BNC
<ul style="list-style-type: none"> • ITT- PAM-SRL-E1B/N64/Eth/FXx, V39 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT), 4x or 8x FXO or FXS ➤ Power: -48VDC, local power ➤ Physical Interfaces: DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), DB9 (Management) ➤ Management: Console Port, Telnet and SNMP via TCU ➤ Power Supply: Not Included (ITT-ACU-SR, optional ITT-TCU-SR) ➤ Remarks: Requires adapter cable (V.35, V.36, X.21, V.24) ➤ Special Version: ITT-PAM-SRL-E1U/N64/Eth/FXx, V39 offers E1 75Ohm BNC
<ul style="list-style-type: none"> • ITT- PAM-SRL-E1B/N64/Eth/FXO-RP, V39RP 	<ul style="list-style-type: none"> ➤ DSL Version: SHDSL ➤ Modulation: TC-PAM16 ➤ Data Rate: 64kbps - 2.3Mbps ➤ Copper Pairs: 1 ➤ Modes: Master / Slave ➤ Interface: 1x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT), 4x or 8x FXO only ➤ Power: -48VDC, remote power source, local power ➤ Physical Interfaces: DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), DB9 (Management) ➤ Management: Console Port, Telnet and SNMP via TCU ➤ Power Supply: Not Included (ITT-ACU-SR, optional ITT-TCU-SR) ➤ Remarks: Requires adapter cable (V.35, V.36, X.21, V.24) ➤ Special Version: ITT-PAM-SRL-E1U/N64/Eth/FXO-RP, V39RP offers E1 75Ohm BNC

• **ITT-PAM-SR2L-E1B/N64/Eth/FXx-MP-RP, V42RP**

- **DSL Version:** SHDSL
- **Modulation:** TC-PAM16
- **Data Rate:** 64kbps - 2.3Mbps
- **Copper Pairs:** 2 (Multi-Point)
- **Modes:** Dual Master / Master-Slave
- **Interface:** 2x E1 (120 Ohm), 1x Nx64 (V.35, V.36, X.21, V.24), 1x Ethernet Bridge (10/100BaseT), 4x or 8x FXO
- **Power:** -48VDC, local power
- **Physical Interfaces:** DB15 (E1), DB25 (Nx64), RJ45 (SHDSL), DB9 (Management)
- **Management:** Console Port, Telnet and SNMP via TCU
- **Power Supply:** Not Included (ITT-ACU-SR, optional ITT-TCU-SR)
- **Remarks:** Requires adapter cable (V.35, V.36, X.21, V.24)
- **Special Version:** No E1 75Ohm Version available

