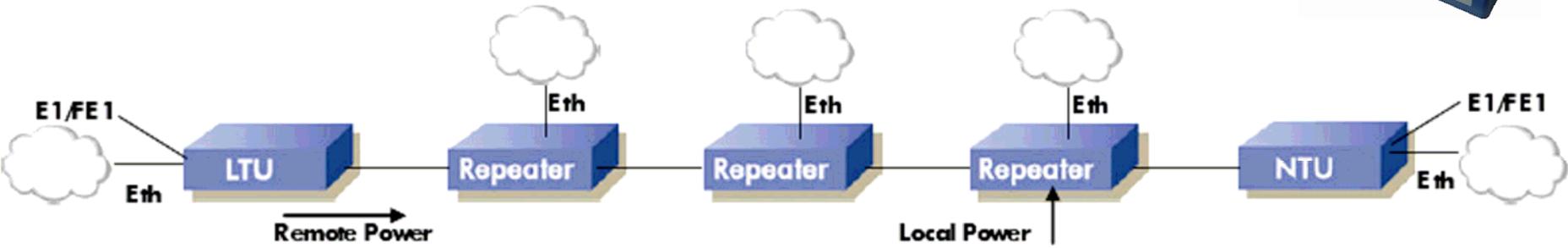




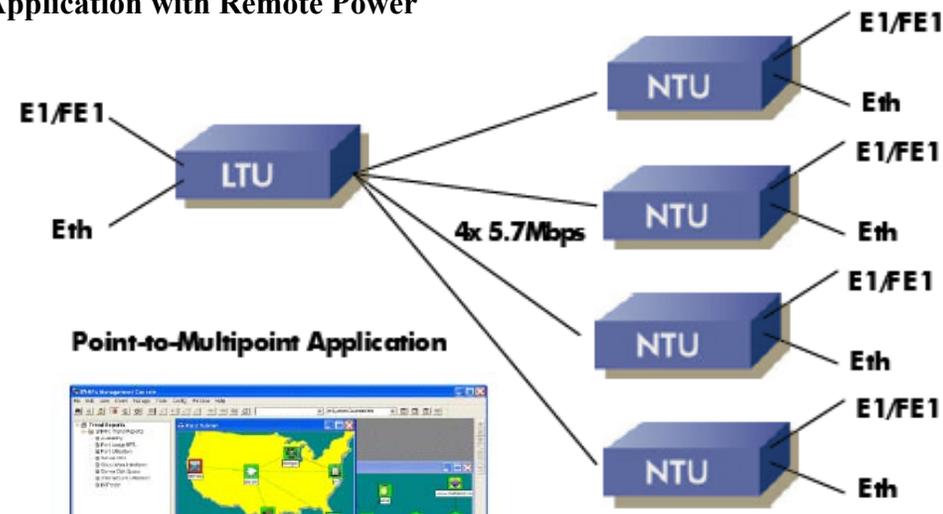
Orion 2 G.SHDSL.bis E1 / Ethernet Up to 22.8Mbps



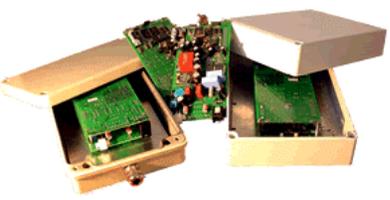
Ethernet Add/Drop Repeater Application with Remote Power



Point-to-Point Bonding Application with Failure Protection



Point-to-Multipoint Application



Repeaters



Rack Card

Desktop

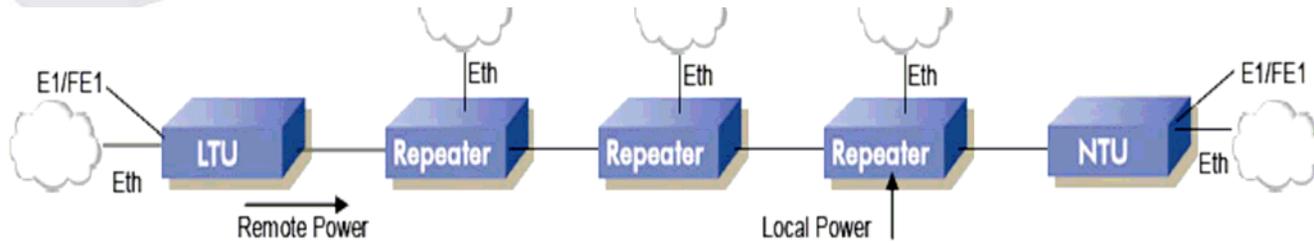


19" Rack and Management Systems





Orion 2 TDM Based G.SHDSL.bis Repeaters



The most common Orion 2 Repeater extends single pair G.SHDSL (TC-PAM16/32) up to 5.7Mbps. It offers Ethernet add/drop functionality (10/100BT, Bridge) and comes in a plastic desktop housing. The repeater can be powered locally or remotely over the DSL line.



This Orion 2 Repeater extends single or dual pair SHDSL (TC-PAM16/32). It offers Ethernet add/drop functionality (10/100BT, Bridge) and is protected by an IP-67 plastic housing.



This Orion 2 Repeater has a diecast aluminium enclosure, which is suitable for rough conditions and outdoor use. The black high end IP67 enclosure offers an external LED indication about the repeater's status as well as additional IP67 protected RJ45 interfaces for Ethernet port access



A Special Repeater for Subsoil and Underground Applications

This IP-68 enclosure is made of the same materials as the cables, meaning wherever a cable is used an IP-68 enclosure can also be used. The high-end polyethylene is particularly resistant to alkaline earths, salt water, fungal and putrefaction bacteria. Thanks to the ingenious design and compact construction the IP-68 enclosure is absolutely watertight. Consequently, they are ideal for direct use in subsoil, underground or aerial applications.



When Rail mounting is a requirement the Orion 2 Repeater with DIN Rail case is the right choice, extending single pair G.SHDSL (TC-PAM16/32) up to 5.7Mbps. it offers Ethernet add/drop functionality (10/100BT, Bridge)



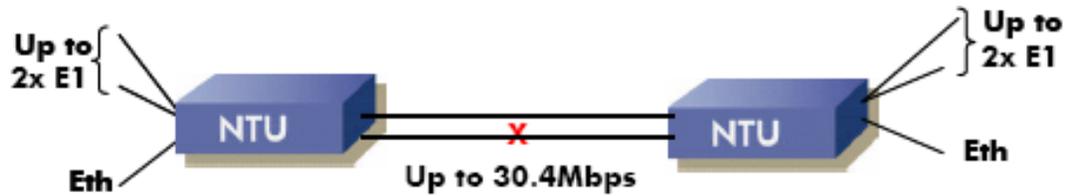


Orion 2+ G.SHDSL.bis E1/Ethernet up to 30.4Mbps

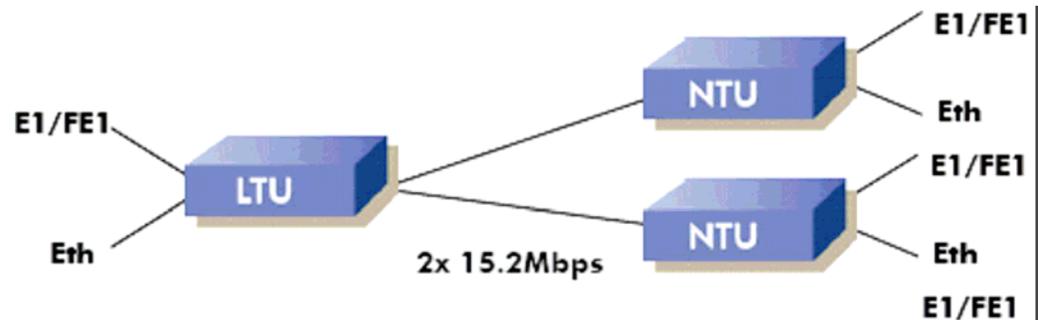


Features

- SHDSL and SHDSL.bis (TC-PAM16/32/64/128)
- Up to 11.4/15.2Mbps over single and up to 22.8/30.4Mbps over dual pair copper
- E1 (G.703/704, balanced/unbalanced)
- Ethernet Bridge (10/100BaseT)
- Multi-Service Operation
- Point-to-Point and Point-to-Multipoint
- Console Port, Telnet, Web, SNMP Management
- 48VDC Powered
- Remote Power Support
- Repeater/Regenerator Support



Point-to-Point Bonding Application with Failure Protection



Point-to-Multipoint Application



Orion Long Reach G.SHDSL bis Modems



Error Free Distances on 0.4mm cable, measured with a line simulator:

0.4mm Cable PAM-16		0.4mm Cable PAM-32		0.4mm Cable PAM-64		0.4mm Cable PAM-128	
DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]
10184	-	10184	-	10184	1350	10184	1500
8000	-	8000	1750	8000	1700	8000	1900
5696	2400	5696	2600	5696	2100	5696	2100
4096	3000	4096	3100	4096	2500	4096	2400
2048	4400	2048	4300	2048	3650	2048	3100

Error Free Distances on 1.2mm cable, measured on real thick cable:

1.2mm Cable PAM-16		1.2mm Cable PAM-32		1.2mm Cable PAM-64		1.2mm Cable PAM-128	
DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]	DataRate [kbit/s]	Reach [m]
5056	7200	5632	7200	5120	7200	3840	7200
1600	13800	2048	13800	1600	13800	896	13800
768	19200	576	19200	320	19200	-	19200