

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

S-Access Etherlink_II

TDM Based SHDSL.bis



Features

- SHDSL and SHDSL.bis (TC-PAM16/32)
- Up to 11.4Mbps over single and up to 22.8Mbps over quadruple 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

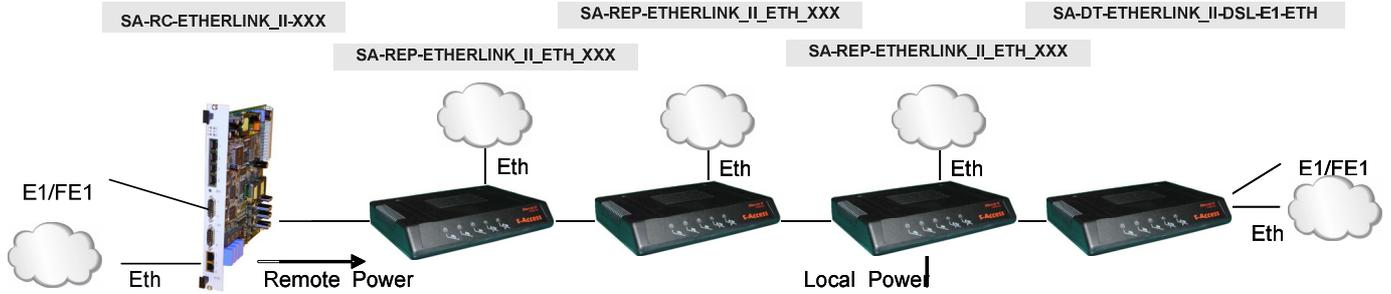
The S-Access Etherlink_II SHDSL.bis product family offers a broad range of products, which are based on the latest SHDSL.bis standard, while also being fully interoperable with existing SHDSL equipment. The S-Access Etherlink_II supports TC-PAM8, TC-PAM16, TC-PAM32 and the new TC-PAM64 line coding. The support of these line codes ensures compatibility with existing SHDSL equipment, that is already installed, in order to protect customer investments, while at the same time providing an upgrade path to the newest DSL technologies.

SHDSL.bis allows symmetrical data and voice transmission at speeds up to 11.4 Mbps over a single pair of copper. In addition, the S-Access Etherlink_II SHDSL.bis modem range also supports DSL channel bonding for up to 4 copper pairs in order to achieve speeds to 22.8Mbps! S-Access Etherlink_II SHDSL.bis modems can provide up to 4 complete E1 interfaces, which support framed and unframed services (G.703/G.704). An optional integrated 4 port Ethernet switch (10/100BaseT) ensures connectivity with bridge functionality. This makes S-Access Etherlink_II SHDSL.bis modems a perfect solution for a wide range of applications in which TDM and IP services need to be transmitted over copper wires.

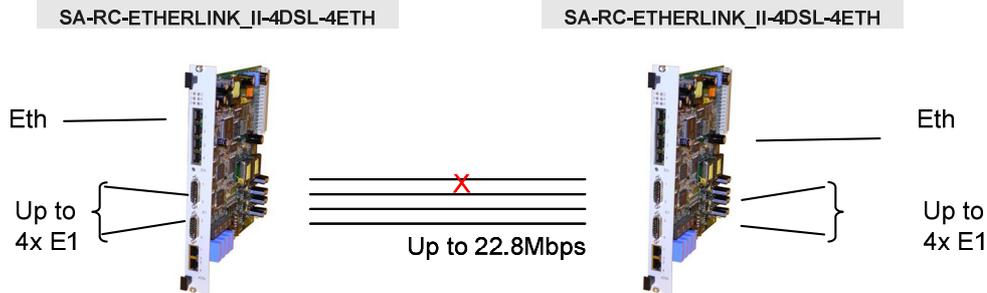
Like all S-Access Etherlink products the S-Access Etherlink_II SHDSL.bis modems are based on industrial components and manufactured according to highest quality standards providing additional value due to the extended temperature ranges and higher reliability. The combination of comprehensive functions providing maximum flexibility together with the higher quality of the S-Access Etherlink_II SHDSL.bis product family make it the perfect choice for all your DSL needs.

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

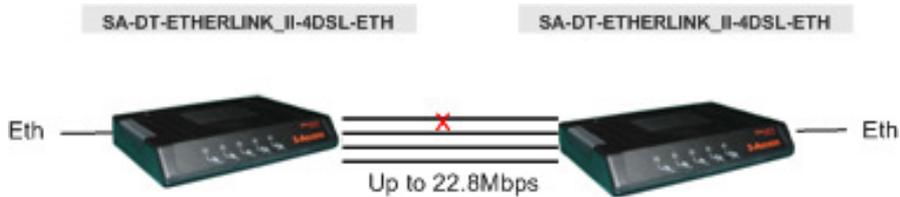
S-Access Etherlink_II SHDSL.bis Applications



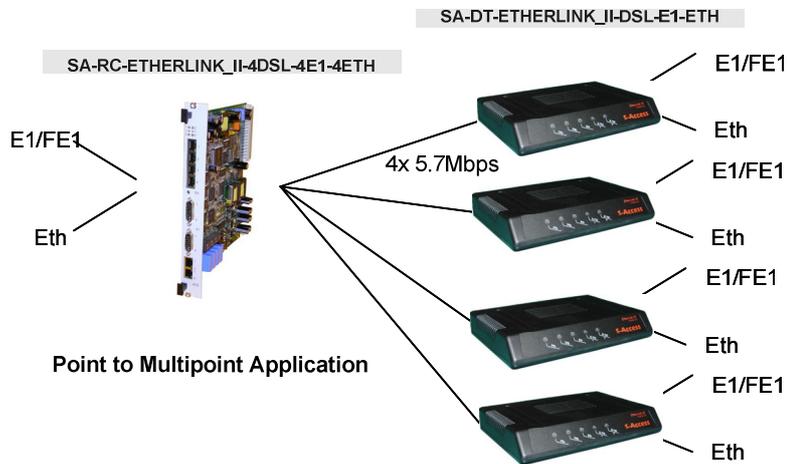
Ethernet Add/Drop Repeater Application with remote Power and local Power



Point to Point Bonding Application with Failure Protection



Point to Point Bonding Ethernet only Application with Failure Protection



Point to Multipoint Application

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

S-Access Etherlink_II SHDSL.bis Desktop Modem



Model: SA-DT-ETHERLINK_II-DSL-ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 5,7Mbps - (optional 11,4 Mbps)
 Copper Pairs : 1
 Modes : Master / Slave
 Interface : Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

Model: SA-DT-ETHERLINK_II-DSL-E1-ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 5,7Mbps - (optional 11,4 Mbps)
 Copper Pairs : 1
 Modes : Master / Slave
 Interface : 1xE1 (120 Ohm), Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

Model: SA-DT-ETHERLINK_II-2DSL-ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 11,4Mbps - (optional 22,8 Mbps)
 Copper Pairs : 2
 Modes : Master / Slave
 Interface : Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

Model: SA-DT-ETHERLINK_II-2DSL-2E1-ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 11,4Mbps - (optional 22,8 Mbps)
 Copper Pairs : 2
 Modes : Master / Slave
 Interface : 2xE1 (120 Ohm), Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

Model: SA-DT-ETHERLINK_II-4DSL-ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 22,8Mbps
 Copper Pairs : 4
 Modes : Master / Slave
 Interface : Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

S-Access Etherlink_II SHDSL.bis RackCards for 19“ Chassis



Model: SA-RC-ETHERLINK_II-DSL-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 5,7Mbps - (optional 11.4 Mbps)
 Copper Pairs : 1
 Modes : Master / Slave
 Interface : 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

Model: SA-RC-ETHERLINK_II-DSL-E1-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 5,7Mbps - (optional 11.4 Mbps)
 Copper Pairs : 1
 Modes : Master / Slave
 Interface : 1xE1 (120 Ohm), 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

Note : Also available with E1-BNC-75 Ohm and 2xE1

Model: SA-RC-ETHERLINK_II-2DSL-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 11,4Mbps - (optional 22.8 Mbps)
 Copper Pairs : 2
 Modes : Master / Slave
 Interface : 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

Model: SA-RC-ETHERLINK_II-2DSL-2E1-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 11,4Mbps
 Copper Pairs : 2
 Modes : Master / Slave
 Interface : 2xE1 (120 Ohm), 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

S-Access Etherlink_II SHDSL.bis Cards for 19" Chassis (continued)



Model: SA-RC-ETHERLINK_II-4DSL-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 22,8Mbps
 Copper Pairs : 4
 Modes : Master / Slave
 Interface : 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

Model: SA-RC-ETHERLINK_II-4DSL-4E1-4ETH

DSL Version : SHDSL / G.SHDSL.bis
 Modulation : TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 22,8Mbps
 Copper Pairs : 4
 Modes : Master / Slave
 Interface : 4xE1 (120 Ohm), 4x Ethernet Bridge (10/100BaseT)
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU

S-Access Etherlink_II SHDSL DIN Rail Modem



Model: SA-PAM-RAIL2N-2E1B/Eth

DSL Version: SHDSL / SHDSL.bis
 Modulation: TC-PAM16 / TC-PAM32
 Data Rate: 64kbps - 11.4Mbps
 Copper Pairs: 2
 Modes: Master / Slave
 Interface: 2x E1 (120 Ohm), 1x Ethernet Bridge (10/100BaseT)
 Power: 18 - 36VDC or -48VDC, accepts local and remote power
 Physical Interfaces: RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (Power), DB9 (Management)
 Management: Console Port, Telnet, HTTP, and SNMP via TCU
 Power Supply: Not Included (option SA-PAM-PA48x)
 Remarks: 2x 5.7Mbps or 1x 11.4Mbps

SHDSL.bis**Up to 22.8Mbps****E1 / Ethernet****Chassis for 19" Rack Cards****Model: SA-MR-ACDC-48V**

Dimensions : 19"/1U, 439x258x43mm (WxHxD), 3.1kg
 Number of Slots : 1
 Power : 48VDC and/or 220VAC
 Remark : 48VDC and voice connectors on the back side

**Model: SA-TT-48V**

Dimensions : 258x258x65mm (WxHxD), 2kg
 Number of Slots : 2
 Power : 24VDC or 48VDC
 Remark : All front access shelf

Model: SA-MR-2-ETH-48V

Dimensions : 19"/2U, 439x258x87mm (WxHxD), 4kg
 Number of Slots : 2
 Power : 24VDC or 48VDC
 Remark : All front access shelf

**DIN-RAIL for Desktop Units****Model: SA-DT-MK-DIN**

Description : DIN Rail Mounting Kit for Desktop Units

**Powersupply for SA-DT-XXX AND SA-TT-XXX****Model: SA-PSS-48_EURO**

Description : Spare Power Supply for TELCOLINKI (Desktop)
 (220VAC/48VDC)

**Model: SA-PSS-48_Inlet. Fig. 8**

Description : Spare Power Supply for Etherlink II (Desktop) (100-
 240VAC/48VDC/300mA), Inlet:Fig.8

SHDSL.bis
Up to 22.8Mbps
E1 / Ethernet

S-Access Etherlink_II SHDSL Overview

DESKTOP (ETHERLINK II), Ethernet Bridge, VLAN, E1



	2 wire - 5,7Mb (opt 11.4Mb)	4 wire 11,4Mb (opt 22.8Mb)	6 wire (17,1Mb)	8 wire (22,8Mb)	1 E1	2 E1	Ethernet Bridge	Dual Pair Bonding	Triple Pair Bonding	Four Pair Bonding	Multi-Service	Point to Point	Point to Multipoint	48V-DC	Remotely powerable	Remote Power source	Telnet Management	Web Management	SNMP Management	
SA-DT-ETHERLINK_II-DSL-ETH																				
SA-DT-ETHERLINK_II-DSL-E1-ETH																				
SA-DT-ETHERLINK_II-2DSL-ETH																				
SA-DT-ETHERLINK_II-2DSL-2E1-ETH																				
SA-DT-ETHERLINK_II-4DSL-ETH																				

- SA-DT-ETHERLINK_II-DSL-ETH
- SA-DT-ETHERLINK_II-DSL-E1-ETH
- SA-DT-ETHERLINK_II-2DSL-ETH
- SA-DT-ETHERLINK_II-2DSL-2E1-ETH
- SA-DT-ETHERLINK_II-4DSL-ETH

RACK-CARDS (ETHERLINK II), Ethernet Bridge, VLAN, E1



	2 wire - 5,7Mb (opt 11.4Mb)	4 wire 11,4Mb (opt 22.8Mb)	6 wire (17,1Mb)	8 wire (22,8Mb)	1 E1	2 E1	3 E1	4 E1	Ethernet Bridge	Dual Pair Bonding	Triple Pair Bonding	Four Pair Bonding	Multi-Service	Point to Point	Point to Multipoint	48V-DC	Remotely powerable	Remote Powersource	Telnet Management	Web Management	SNMP Management	
SA-RC-ETHERLINK_II-DSL-ETH																						
SA-RC-ETHERLINK_II-DSL-E1-ETH																						
SA-RC-ETHERLINK_II-2DSL-ETH																						
SA-RC-ETHERLINK_II-2DSL-2E1-ETH																						
SA-RC-ETHERLINK_II-4DSL-ETH																						
SA-RC-ETHERLINK_II-4DSL-4E1-ETH																						

- SA-RC-ETHERLINK_II-DSL-ETH
- SA-RC-ETHERLINK_II-DSL-E1-ETH
- SA-RC-ETHERLINK_II-2DSL-ETH
- SA-RC-ETHERLINK_II-2DSL-2E1-ETH
- SA-RC-ETHERLINK_II-4DSL-ETH
- SA-RC-ETHERLINK_II-4DSL-4E1-ETH