

SHDSL.bis**Up to 60Mbps****E1 / Ethernet / Nx64**

S-Access Etherlink_IV

TDM Based SHDSL.bis

Features



- SHDSL.bis based on TC-PAM4/8/16/32/64/128 for single and multiple pair operation
- Up to 15.2Mbps over single and up to 60.8Mbps over four pair copper
- Multiservice E1 (G.703/704) and Nx64 (V.35/36, X.21) Ethernet Interfaces
- Daughterboard's: RS-232/485/422, In-/Output, Real Time Clock, Memory for Log, Bluetooth
- Support of SFPs Fiber uplink
- Layer 2 managed Ethernet Switch with VLAN support (10/100BaseT)
- Spanning Tree (RSTP) for ring applications
- Built-in cross-connect (Multipoint)
- Regenerator/Repeater available
- Remote power feature (120/200VDC)
- Console, Telnet, and SNMP management
- Desktop, Rackcard, and Minirack form factors
- Extended temperature range
- High quality and high performance

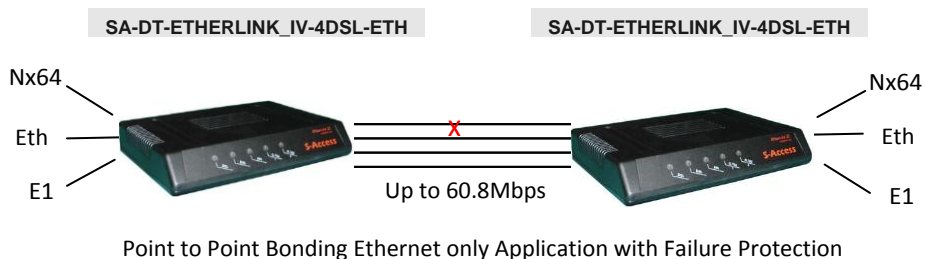
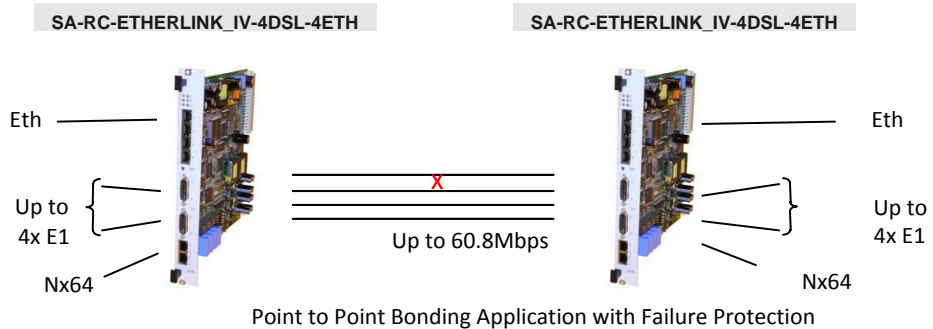
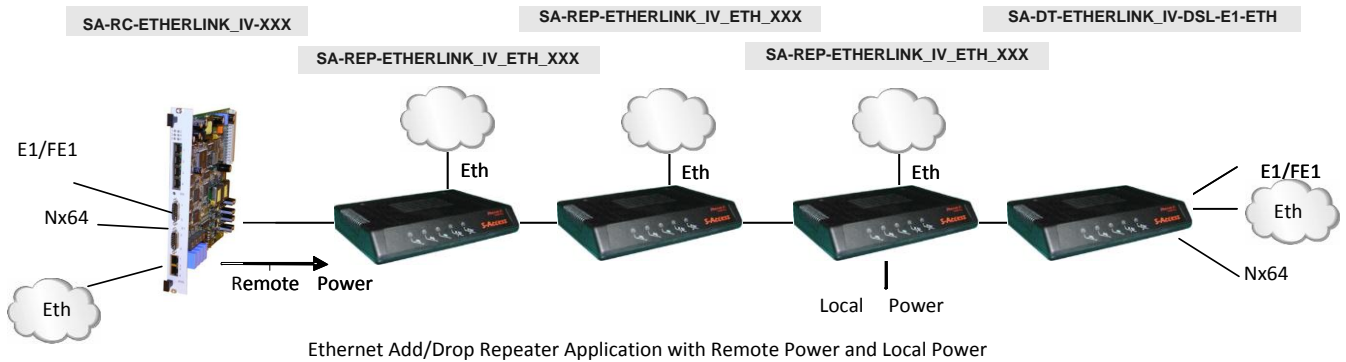
The S-Access Etherlink_IV SHDSL.bis product family offers a broad range of products, which are based on the latest SHDSL.bis standard (ITU-T G.991.2 & ETS TS 101 524), while also being fully interoperable with existing SHDSL equipment. The S-Access Etherlink_IV supports TC-PAM8/16/32 and the new TC-PAM64/128 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 Extended allows symmetrical data and voice transmission at speeds up to 15.2 Mbps over a single pair of copper. In addition, the S-Access Etherlink_IV SHDSL.bis modem range also supports DSL channel bonding for up to 4 copper pairs in order to achieve speeds to 60.8Mbps! This incredible speed makes Fiber installations in many places needles. This S-Access Etherlink_IV SHDSL.bis modems can provide up to 4 complete E1 interfaces, which support framed and unframed services (G.703/G.704). An integrated 2 or 4 port Ethernet switch with VLAN support (10/100BaseT) ensures connectivity to IP services. This makes S-Access Etherlink_IV 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_IV 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_IV SHDSL.bis product family make it the perfect choice for all your DSL needs.

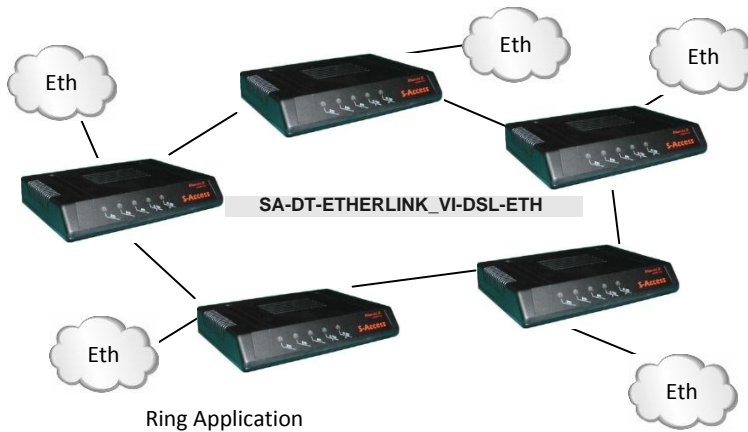
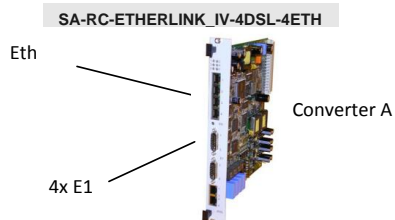
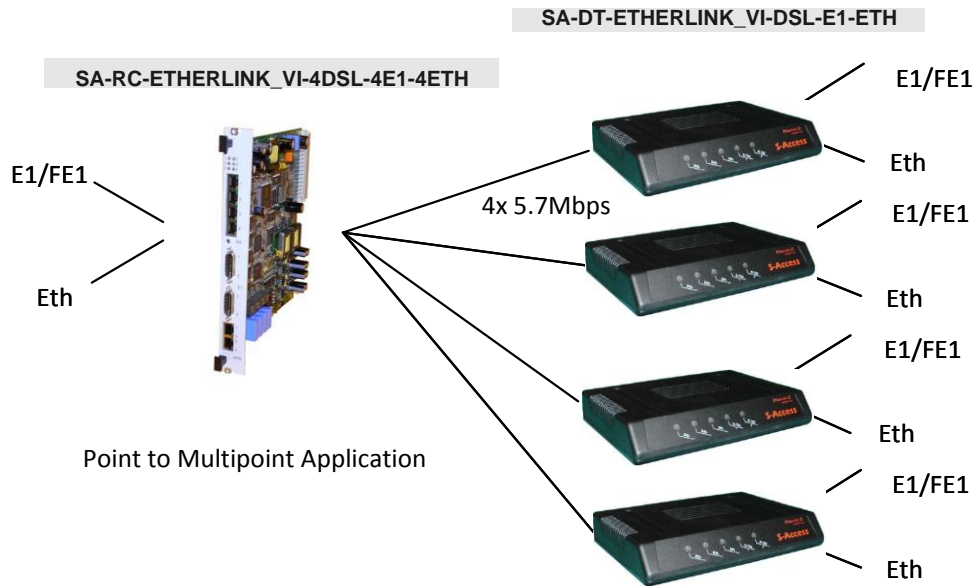
SHDSL.bis
Up to 60Mbps
E1 / Ethernet / Nx64

S-Access Etherlink_IV SHDSL.bis Applications



SHDSL.bis
Up to 60Mbps
E1 / Ethernet / Nx64

S-Access Etherlink_IV SHDSL.bis Applications



SHDSL.bis**Up to 60Mbps****E1 / Ethernet / Nx64****S-Access ETHERLINK_VI SHDSL.bis Desktop Modem**

MDS962AE_10BT

**Model: SA-DT-ETHERLINK_IV-DSL-ETH**

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 / TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 15,232 Mbps
 Copper Pairs : 1
 Modes : Master / Slave / Auto
 Interface : Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 72 VDC, accepts local and remote power
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management)
 Management : Console Port, Telnet, HTTP and SNMP via TCU
 Power Supply : MDS95XE-PS included

MDS964AE_10BT

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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 / TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 30,464 Mbps, 2x15,232 Mbps
 Copper Pairs : 2
 Modes : Master / Slave / Auto / Multipair
 Interface : Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 72 VDC, accepts local and remote power
 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_IV-DSL-2ETH

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 / TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 15,232 Mbps
 Copper Pairs : 1
 Modes : Master / Slave / Auto
 Interface : 2xEthernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 230 VDC, accepts local and remote power
 Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management), USB
 Management : Console Port, Telnet, HTTP and SNMP
 Power Supply : 90-260VAC MDS95XE-PS included

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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 / TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 30,464 Mbps, 2x15,232 Mbps
 Copper Pairs : 2
 Modes : Master / Slave / Auto / Multipoint / Multipair
 Interface : 2xEthernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 230 VDC, accepts local and remote power

SHDSL.bis**Up to 60Mbps****E1 / Ethernet / Nx64****S-Access ETHERLINK_VI SHDSL.bis Desktop Modem****Model: SA-DT-ETHERLINK_IV-DSL-2E1-2ETH**

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128
 Data Rate : 128kbps - 15,232 Mbps
 Copper Pairs : 1
 Modes : Master / Slave / Auto
 Interface : 2xE1 (75/120 Ohm), 2xEthernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 230 VDC, accepts local and remote power
 Physical Interfaces : RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management), USB
 Management : Console Port, Telnet, HTTP and SNMP
 Power Supply : 90-260VAC MDS95XE-PS included

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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128 / TC-PAM128
 Data Rate : 128kbps - 30,464 Mbps, 2x15,232 Mbps
 Copper Pairs : 2
 Modes : Master / Slave / Auto / Multipoint / Multipair
 Interface : 2xEthernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 230 VDC, accepts local and remote power
 Physical Interfaces : RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management), USB
 Management : Console Port, Telnet, HTTP and SNMP
 Power Supply : 90-260VAC MDS95XE-PS included

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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 / TC-PAM64 / TC-PAM128 / TC-PAM128
 Data Rate : 128kbps - 60,828 Mbps, 4x15,232 Mbps
 Copper Pairs : 4
 Modes : Master / Slave / Auto / Multipoint / Multipair
 Interface : 4xEthernet 10/100BaseT (Layer 2 Managed Switch)
 Power : 36 to 230 VDC, accepts local and remote power
 Physical Interfaces : RJ48 (E1), RJ45 (Ethernet), RJ48 (SHDSL), Molex (POWER), DB9 (Management), USB
 Management : Console Port, Telnet, HTTP and SNMP
 Power Supply : 90-260VAC MDS95XE-PS included

SHDSL.bis

Up to 60Mbps

E1 / Ethernet / Nx64

S-Access Etherlink_IV SHDSL.bis RackCards for 19" Chassis



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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 /
 TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 15,232Mbps
 Copper Pairs : 1
 Modes : Master / Slave / Auto
 Power : 36 to 72 VDC local Power, 120/200VDC remote power source
 Interface : 2xE1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Physical Interfaces : DB 15 (E1), RJ45 (Ethernet), RJ48 (SHDSL) DIN4 16 12 (Backplane)
 Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

Model: SA-RC-ETHERLINK_IV-2E1-N64-DSL-4ETH

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 /
 TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 15,232Mbps
 Copper Pairs : 1
 Modes : Master / Slave / Auto
 Power : 36 to 72 VDC local Power, 120/200VDC remote power source
 Interface : 2xE1 (75/120Ohm), 1xN64,
 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Physical Interfaces : DB 15 (E1), DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL)
 DIN4 16 12 (Backplane)
 Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

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

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 /
 TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 30,464Mbps, 2 x 15,232Mbps
 Copper Pairs : 2
 Modes : Master / Slave / Auto
 Power : 36 to 72 VDC local Power, 120/200VDC remote power source
 Interface : 4xE1 (75/120Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Physical Interfaces : DB 15 (E1), RJ45 (Ethernet), RJ48 (SHDSL) DIN4 16 12 (Backplane)
 Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

Model: SA-RC-ETHERLINK_IV-2E1-N64-2DSL-4ETH

DSL Version : SHDSL / G.SHDSL.bis / Extended
 Modulation : TC-PAM 4 / TC-PAM 8 / TC-PAM 16 / TC-PAM 32 / TC-PAM 64 / TC-PAM 128
 Data Rate : 128kbps - 30,464Mbps, 2 x 15,232Mbps
 Copper Pairs : 2
 Modes : Master / Slave / Auto
 Power : 36 to 72 VDC local Power, 120/200VDC remote power source
 Interface : 2xE1 (75/120Ohm), 1xN64, 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
 Physical Interfaces : DB 15 (E1), DB26 (Nx64), RJ45 (Ethernet), RJ48 (SHDSL) DIN4 16 12 (Backplane)
 Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

SHDSL.bis**Up to 60Mbps****E1 / Ethernet / Nx64****S-Access Etherlink_IV SHDSL.bis RackCards for 19" Chassis****Model: SA-RC-ETHERLINK_IV-4DSL-4ETH**

DSL Version : SHDSL / G.SHDSL.bis / Extended
Modulation : TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 /
TC-PAM64 / TC-PAM128
Data Rate : 128kbps - 60.928Mbps, 4x15,232Mbps
Copper Pairs : 4
Modes : Master / Slave / Auto
Power : 36 to 72 VDC localPower
Interface : 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Physical Interfaces : RJ45 (Ethernet), RJ48 (SHDSL) DIN4 1612 (Backplane)
Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

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

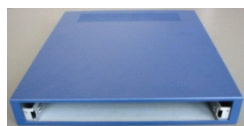
DSL Version : SHDSL / G.SHDSL.bis / Extended
Modulation : TC-PAM4 / TC-PAM8 / TC-PAM16 / TC-PAM32 /
TC-PAM64 / TC-PAM128
Data Rate : 128kbps - 60.928Mbps, 4x15,232Mbps
Copper Pairs : 4
Modes : Master / Slave / Auto
Power : 36 to 72 VDC localPower, 120/200VDC remote power source
Interface : 4xE1 (120 Ohm), 4x Ethernet 10/100BaseT (Layer 2 Managed Switch)
Physical Interfaces : DB15(E1), RJ45 (Ethernet), RJ48 (SHDSL) DIN4 1612 (Backplane)
Management : Telnet, HTTP and SNMP via Console Port via ACU/TCU

SHDSL.bis**Up to 60Mbps****E1 / Ethernet / Nx64**

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-DESK-TOP_1-48V**

Dimensions : 19"/1U, 260x258x43mm (WxHxD), 2.1kg
Number of Slots : 1
Power : 48VDC and/or 220VAC
Remark : 48VDC and Monitor connectors on the back site

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 60Mbps****E1 / Ethernet / Nx64****S-Access****S-Access Etherlink_IV DT SHDSL Overview**

 Functionality	Standalone	Rail Mounting	Subrack Module	Protected Housing	Single Pair	Dual Pair Bonding	Triple Pair Bonding	Quadruple Pair Bonding	Point-to-Point	Point-to-Multipoint	E1 (120Ohm)	E1 (75Ohm) optional	Ethernet Bridge	Ethernet Add/Drop	Nx64kpbs Interface	E1 Cross Connect	Remote Power Receiver	Remote Power Source	Console Port Management	Telnet Management	Web Management	SNMP Management	Local Power 18-36VDC	Local Power 36-230VDC
	Etherlink IV - DeskTop-Models																							
SA-DT-Etherlink_IV-2E1-DSL-2ETH	√				√				√		√	√	√	√		*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-DSL-2ETH-24V	√				√				√		√	√	√	√		*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-2DSL-2ETH	√				√	√			√	√	√	√	√	√	√	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-2DSL-2ETH-24V	√				√	√			√	√	√	√	√	√	√	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-DSL-2ETH	√				√				√					√			√		√	√	√	√	√	√
SA-DT-Etherlink_IV-DSL-2ETH-24V	√				√				√					√			√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2DSL-2ETH	√				√	√			√	√				√	√		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2DSL-2ETH-24V	√				√	√			√	√				√	√		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-4DSL-4ETH	√				√	√	√	√	√	√				√	√		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-4DSL-4ETH-24V	√				√	√	√	√	√	√				√	√		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-DSL-NX64-2ETH	√				√				√		√	√			*1	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-DSL-NX64-2ETH-24V	√				√				√		√	√			*1	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-2DSL-NX64-2ETH	√				√	√			√	√	√	√			*1	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2E1-2DSL-NX64-2ETH-24V	√				√	√			√	√	√	√			*1	*1	√		√	√	√	√	√	√
SA-DT-Etherlink_IV-DSL-NX64-2ETH	√				√				√				√		*1		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-DSL-NX64-2ETH-24V	√				√				√				√		*1		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2DSL-NX64-2ETH	√				√	√			√	√			√	√	*1		√		√	√	√	√	√	√
SA-DT-Etherlink_IV-2DSL-NX64-2ETH-24V	√				√	√			√	√			√	√	*1		√		√	√	√	√	√	√


*1 Will be available in Q2 2010

SHDSL.bis

Up to 60Mbps

E1 / Ethernet / Nx64

S-Access Etherlink_IV RC SHDSL Overview

 Functionality	Standalone	Rail Mounting	Subrack Module	Protected Housing	Single Pair	Dual Pair Bonding	Triple Pair Bonding	Quadruple Pair Bonding	Point-to-Point	Point-to-Multipoint	E1 (1200hm)	E1 (750hm) optional	Ethernet Bridge	Ethernet Add/Drop	Nx64kbps Interface	E1 Cross Connect	Remote Power Receiver	Remote Power Source	Console Port Management	Telnet Management	Web Management	SNMP Management	
	Etherlink IV - RackCard -Models																						
SA-RC-Etherlink_IV-2E1-DSL-4ETH	*1		√		√				√		√	√	√			*2		√	√	√	√	√	√
SA-RC-Etherlink_IV-2E1-Nx64-DSL-4ETH	*1		√		√				√		√	√	√		*2	*2		√	√	√	√	√	√
SA-RC-Etherlink_IV-2DSL-4E1-4ETH	*1		√		√	√			√	√	√	√	√	√		*2		√	√	√	√	√	√
SA-RC-Etherlink_IV-2DSL-2E1-nx64-4ETH	*1		√		√	√			√	√	√	√	√	√	*2	*2		√	√	√	√	√	√
SA-RC-Etherlink_IV-4DSL-4E1-4ETH	*1		√		√	√	√		√	√	√	√	√	√		*2		√	√	√	√	√	√
SA-RC-Etherlink_IV-4DSL-4ETH	*1		√		√	√	√	√	√	√			√	√					√	√	√	√	√

*1 Yes, if you use UTT1