

# 1423 SHDSL ROUTER



> THE TELINDUS 1423 SHDSL ROUTER IS A PROFESSIONAL STATE-OF-THE-ART MULTI-PORT ROUTER WITH BUILT-IN SHDSL LINE INTERFACE OFFERING SYMMETRIC FULL-DUPLEX TRANSMISSION UP TO 2.3 MBPS OVER A SINGLE TWO-WIRE UNCONDITIONED UNSHIELDED TWISTED-PAIR CABLE.

The line speed can be automatically adapted to optimise the throughput as a function of the characteristics of the local loop. To achieve even higher speeds (up to 4.6 Mbps) or a longer reach, a 2-line pair version is also available.

The basic unit features one DSL interface, a four port 10/100Base-T Ethernet switch, and an additional independent 10/100Base-T connection. The latter one can be used for creating a DMZ (Demilitarised zone) or for backup purposes.

Additional models offer the possibility for securing the DSL connection using up to two Basic Rate ISDN connections (Four B channels).

All Telindus 1423 SHDSL Routers can be used as CPE in combination with any

Telindus or third-party DSLAM (Digital Subscriber Line Access Multiplexer), and in point-to-point configurations.

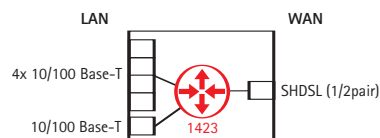
Selected models, featuring a hardware based encryption accelerator, can also be used in combination with traditional Frame Relay or PPP based access networks.

Fully supported by the TDRE (Telindus Dynamic Routing Engine), the unit supports advanced features such as IP Quality of Service, IP Virtual Private Networks and support for VLANs. With a routing performance of approximately 45.000 pps, the 1423 SHDSL Router is capable to handle any type of multimedia or delay-sensitive traffic. This makes the Telindus 1423 SHDSL Router the ideal access device for connecting business users, offering secured managed IP services at the highest possible speeds.

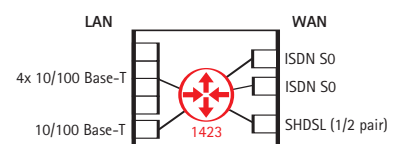
## FEATURES & BENEFITS

- > FEATURE-RICH MULTI-PORT ROUTER WITH BUILT-IN SHDSL LINE INTERFACE
- > 1 OR 2 SHDSL LINE PAIRS (UP TO 2.3 OR 4.6MBPS)
- > BUILT-IN 4-PORT 10/100BASE-T ETHERNET SWITCH
- > SECOND INDEPENDENT ETHERNET INTERFACE FOR CREATION OF DMZ OR BACK-UP
- > OPTIONAL ISDN BACK-UP FOR SECURING THE DSL LINE
- > FOR USE IN POINT-TO-POINT CONFIGURATIONS OR IN COMBINATION WITH A DSLAM
- > SUPPORT FOR ADVANCED SERVICES BASED ON VPN AND VLANS
- > ADVANCED QOS MECHANISMS FOR SUPPORTING VOIP TRAFFIC
- > FULLY MANAGEABLE WITH A VARIETY OF TOOLS

v 1423 SHDSL 2ETH-4P ROUTER MODEL



v 1423 SHDSL 2ETH-4P ISDN ROUTER MODEL



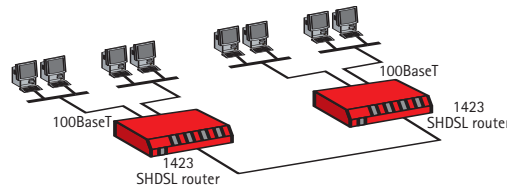
The equipment supports different management interfaces on different levels of the network. At the local level it is possible to manage the equipment over a management console interface by means of a PC maintenance tool, a command line interface or a menu driven interface.

On IP level the equipment supports Telnet, SNMP, HTTP or TFTP/FTP. In this way it is possible to integrate the unit in any existing network management environment.

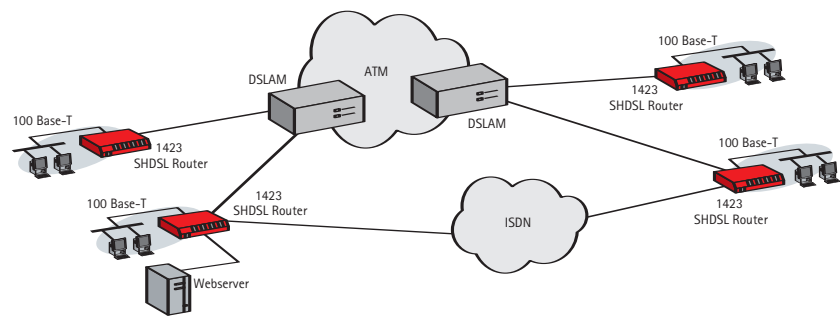
At the network level it is possible to manage the access network with a stand-alone element manager or with an element manager integrated into HP OpenView.

The Telindus 1423 SHDSL Router supports auto-install features over the WAN network. This makes it ideally suited for plug-and-play installation at customer premises while the configuration is prepared at a central site.

#### POINT-TO-POINT CONNECTION



#### IN COMBINATION WITH DSLAM



available on Q2 2005

#### STANDARD VERSIONS

	# Copper pairs	Ethernet ports	ISDN SO ports	Hardware Accelerator	ATM Encapsulation	PPP, FR, HDLC Encapsulation
1423 SHDSL 2ETH-4P	1	1+4	0	No	Yes	No
1423 SHDSL-2P 2ETH-4P	2	1+4	0	No	Yes	No
1423 SHDSL 2ETH-4P HWA	1	1+4	0	Yes	Yes	Yes
1423 SHDSL-2P 2ETH-4P HWA	2	1+4	0	Yes	Yes	Yes
1423 SHDSL 2ETH-4P ISDN HWA	1	1+4	2	Yes	Yes	Yes
1423 SHDSL-2P 2ETH-4P ISDN HWA	2	1+4	2	Yes	Yes	Yes

#### LINE INTERFACE

- > Applicable standards: ITU-T G.991.2, G.994
- > Single pair or two pair line access
- > Connector: RJ12/RJ45
- > Impedance: 135 ohm
- > Coding: TC PAM, compliant ITU-T G.991.2 Annex A&B (G.SHDSL), ETSI TS 101524
- > Line speeds:
  - > Single pair: N x 64 kbps (N = 1 ... 36)
  - > Two pair: N x 128 kbps (N = 1 ... 36)
- > Handshaking: compliant G.994.1 (automatic speed negotiation) or fixed speed
- > Handshaking: compliant G.994.1 (automatic speed negotiation) or fixed speed
- > Performance monitoring: compliant G.826 (errored seconds, severely errored seconds, unavailability seconds)

#### IDEAL MAXIMUM DISTANCE (NOISE-FREE) ON A SINGLE PAIR

1p line speed (kbps)	2p line speed (kbps)	0.4mm (km)	0.5mm (km)	0.6mm (km)	0.8mm (km)	1.0mm (km)	1.2mm (km)
64	128	11.0	15.1	21.5	27.2	38.2	42.4
128	256	8.0	11.0	15.6	19.8	27.8	30.8
256	512	8.2	11.3	16.0	20.3	28.5	31.6
512	1024	7.2	9.9	14.0	17.8	25.0	27.7
1024	2048	5.5	7.6	10.7	13.6	19.1	21.2
1536	3072	4.0	5.5	7.8	9.9	13.9	15.4
2048	4096	4.2	5.8	8.2	10.4	14.6	16.2
2304	4608	4.0	5.5	7.8	9.9	13.9	15.4

#### LAN INTERFACES

- > Compliant with IEEE 802.3 10Mbps HDX/FDX Ethernet
- > Compliant with IEEE 802.3u 100Mbps HDX/FDX Ethernet
- > 10/100Mbps auto-sense

- > Auto cross-over
- > RJ45 Unshielded Twisted Pair (UTP)
- > Number of interfaces: 1+4

#### INTEGRATED VLAN SWITCH

- > Number of ports: 4
- > VLAN tagging per port
- > Tagged, untagged or trunking VLAN operation
- > Maximum total number of VLANs: 16

#### BRI INTERFACES (ON SELECTED MODELS ONLY)

- > PPP WAN encapsulation
- > Connector: RJ45 SO DTE
- > Applicable standards: I.420, I.412, I.430, I.440 (= Q.920), I.441 (= Q.921), I.450 (= Q.930), I.451 (= Q.931)
- > Number of interfaces: 2

#### CONTROL INTERFACE

- > Applicable standards: ITU-T V.24, V.28, EIA/TIA 574
- > DCE signals: RXD, TXD, SGND
- > Connector: female DB9

#### SUPPORTED DSL ENCAPSULATION PROTOCOLS

- > ATM
- > Frame-Relay (on selected models)
- > PPP (on selected models)
- > HDLC (on selected models)

#### IP ROUTING

- > Conform TDRE (Telindus Dynamic Routing Engine)

#### ROUTING AND BRIDGING PERFORMANCE

- > Routing performance: 45.000 pps
- > Bridging performance: 36.000 pps

- > Supported number of Frame-Relay DLCIs: 200 (on HWA models)
- > Supported number of ATM PVCs: 31
- > Supported number of VPN tunnels: 10
- > Supported number of VLANs: 200
- > Supported number of bridge-groups: 13

#### MEMORY

- > 16 MByte DRAM
- > 8 MByte Flash

#### MAINTENANCE AND MANAGEMENT SUPPORT

- > Conform TDRE (Telindus Dynamic Routing Engine)
- > Reset button for reloading default configuration

#### FRONT PANEL INDICATORS

- > PWR: Power
- > LINE / LNK1: first line pair status
- > LINE / LNK2: second line pair status (on 2 pair versions only)
- > LINE / ACT: WAN encapsulation protocol status (DSL or ISDN)
- > LINE / BACKUP: ISDN status (only on ISDN models)
- > LAN1 / 1..4: LAN status on Ethernet switch
- > LAN2: LAN status of second Ethernet port

#### MECHANICAL DATA (H X W X D)

- > 45 x 220 x 135 mm, Weight: 500 g

#### POWER REQUIREMENTS

- > 9 Vdc, 1A, integrated power switch
- > External power adapters available for 24/48Vdc, 115Vac and 230 Vac

#### SALES CODES

- > 188493 1423 SHDSL 2ETH-4P 230VAC
- > 188500 1423 SHDSL-2P 2ETH-4P 230VAC
- > 188495 1423 SHDSL 2ETH-4P HWA 230VAC
- > 188503 1423 SHDSL-2P 2ETH-4P HWA 230VAC
- > 188498 1423 SHDSL 2ETH-4P ISDN HWA 230VAC
- > 188507 1423 SHDSL-2P 2ETH-4P ISDN HWA 230VAC

Units without external power module and separate power adapters can be found in the sales codes quick reference

#### MORE INFO:

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