

1020 Router Series



The 1020 Router Series is the entry level series of routers for secure LAN data connectivity over leased access lines. Along with the other OneAccess Routers they offer a complete solution for mission-critical business applications. All these devices have been specifically designed to meet the requirements of enterprise branch offices and service provider managed services.

1020 ROUTER SERIES

The OneAccess 1020 Router Series offers secure LAN data connectivity over leased access lines. Along with the other OneAccess Routers, they offer a complete solution for mission-critical business applications. All these devices have been specifically designed to meet the requirements of enterprise branch offices and service provider managed services. The OneAccess 1020 Router Series offers the most cost effective solution for realising LAN connectivity for small and medium size end user networks with basic hardware needs.

The 1020 Router Series is part of the family of TDRE compliant products (Total Dynamic Routing Engine). It includes all features to build secure IP VPN connections with quality of service over leased line, Frame Relay and MPLS networks. With a routing performance of approximately 60.000 pps (95.000 pps for the Telindus 1021 Router) and a built-in hardware accelerator for encryption, the Telindus 1020 Router Series is capable of routing at wire speed without compromise even with performance demanding requirements like access lists and the stateful inspection firewall.

1021 ROUTER

The 1021 Router is a LAN to LAN router with built-in 4-port Ethernet switch and an optional ISDN backup facility. It is the ideal access device for offering additional secured managed IP services in ethernet based networks (e.g. metro). The basic model comes with one 10/100 Ethernet LAN with integrated 4-ports Ethernet and VLAN switch and a second 10/100 Ethernet LAN. A model with additional 2 BRI (Basic Rate ISDN) interfaces offers backup functionality with the possibility to aggregate the speeds of the different B channels up to 256 kbps.

1022 ROUTER

The 1022 Router has a 2Mbps E1 WAN interface. It is extremely well suited to transport LAN traffic over a PDH or SDH infrastructure. This G703 interface can be used as a transparent G703, a framed E1 or a fractional E1.

1023 ROUTER

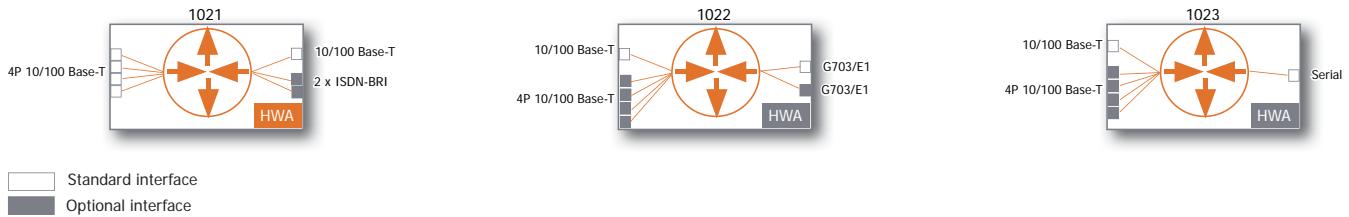
The 1023 Router has a serial interface on a DB25 connector. The interface can be configured as a X.21, V.35, V.36 (RS-449), RS-530, RS-530A or V.24 (RS-232) interface to suit the needs for almost any serial interface type. Conversion cables to the standard connector type are available. It supports serial interface speeds up to 10Mbps. In the V.24 mode both synchronous and asynchronous data transfer is possible.

FEATURES AND MANAGEMENT

WAN protocols over the G703 or serial interface are PPP and Frame Relay. PPP is most appropriate for leased line connections. Frame Relay is most appropriate for connection over a Frame Relay or MPLS network. As all TDRE routers, the 1020 Router Series is manageable through a variety of maintenance and management tools. These compact desktop routers can be mounted in a rack through an optional rack mount kit. The units can be delivered with a power plug for 110Vac, 230Vac, 24Vdc or -48Vdc powering.

FEATURES AND BENEFITS

- High performance LAN and WAN Routers
- LAN to LAN and Single Port WAN versions
- IP Routing and Bridging
- Class of service routing and bridging
- VLAN Interconnect
- IP VPN Termination



1020 ROUTER SERIES SPECIFICATIONS

LAN ports

- 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)

Integrated Ethernet switch (1021 versions)

- Number of ports: 4
- 802.1Q VLAN tagging per port
- Tagged, untagged and trunking VLAN operation
- Maximum total number of VLAN's: 16

G703 interface (1022 version)

- Applicable standards: ITU-T G.703, G.704, G.706, G.775, G.823, G.826
- Data rate: 2.048kBit/s ± 50ppm, co-directional
- Coding: HDB3
- Impedance: 120 Ohm balanced
- Transparent 2Mbit/s and G.704 framed E1 operation
- Fractional speeds (E1): N x 64 kbps (N = 1 ... 32)
- Connector: RJ45 DTE
- Clocking: slave receive, internal
- CRC4 monitoring and insertion
- Layer 2 protocols: PPP, Frame-Relay, HDLC

Serial interface (1023 version)

- Applicable electrical standards: ITU-T V.10, V.11, V.28
- Connector: female DB25 (ISO 2110), directly compliant with RS530, RS530A
- Through adapter cable: V.35, V.36 (RS449), X.21, V.24 (RS232)
- DTE signals: SGND (102), TXD (103), RXD (104), RTS (105), CTS (106), DTR (108), DCD (109), EXTCLK (113), TXCLK (114), RXCLK (115), RI (125), RDL (140), AL (141), TI (142)
- X.21 signals: G, T, R, C, I, S, X
- Synchronous or asynchronous operation
- Synchronous clocking: internal, internal transmit, slave receive, external
- Synchronous interface speeds slave receive and external clocking: all speeds up to 10Mbps
- Synchronous interface speeds in internal and internal transmit clocking: 64, 128, 256, 512, 1024, 2048, 4096, 8192 kbps
- Asynchronous interface speeds: 9600, 19200, 38400, 57600, 115200 bps
- Layer 2 protocols: PPP, Frame-Relay, HDLC

In a nutshell:

Versions	LAN					WAN		Features
	10/100 FE	10/100 FE	G703/ E1	Serial	Back-up	Encryption Accelerator		
1021 2 ETH-4P HWA	4*	1					✓	
1021 2ETH-4P ISDN-2BRI HWA	4*	1			2 BRI		✓	
1022 E1 HWA	1		1				✓	
1022 E1 ADM 2ETH-4P LE	4*+1		2**					
1023 SERIAL HWA	1			1			✓	
1023 2ETH-4P LE	4*+1			1				

*4 port Ethernet switch

** Second E1 is for add-and-drop of time-slots only (ADM)

BRI interfaces (1021 version)

- ISDN S/T BRI interfaces
- ISDN Dial-up or leased line mode
- Applicable standards: I.420, I.412, I.430, I.440 (= Q.920), I.441 (= Q.921), I.450 (= Q.930), I.451 (= Q.931)
- Connector: RJ45 S0 DTE
- PPP and MLPPP WAN encapsulations

Control Interface

- Applicable standards: ITU-T V.24, V.28, EIA/TIA 574
- DCE signals: SGND (102), TXD (103), RXD (104)
- Connector: female DB9
- Speed: 9600bps

IP Routing and Bridging

- Conform TDRE 12.0 (Total Dynamic Routing Engine)
- On-board encryption hardware accelerator for DES and 3DES encryption
- Full forwarding performance of 64byte packets at maximum interface speed
- Routing and bridging performance: 90 kpps (1021) and 60 kpps (1022 & 1023)
- Number of Frame Relay DLCIs: 200
- Number of IPSEC, L2TP or GRE tunnels: 25
- Number of VLAN's: 200
- Number of bridge-groups: 13

Maintenance and Management Support

- Conform TDRE 12.0 (Total Dynamic Routing Engine)

Front Panel Indications

- PWR: Power
- LINE / BACKUP: ISDN backup status (on ISDN model only)
- LINE / ACT: ISDN encapsulation protocol status (on ISDN model only)
- WAN1 / LNK: WAN interface physical layer status
- WAN1 / ACT: WAN interface protocol status
- LAN1 / 1..4: LAN status on the Ethernet switch ports
- LAN2: LAN status on second Ethernet port

Memory

- Flash memory: 8 Mbyte
- RAM memory: 16 Mbyte

Mechanical Data

- Desktop (1 rack-unit high)
- Dimensions: 45 x 220 x 135 mm
- Weight: 500 g
- Wall mountable
- Rack mountable (optional 19" rack-mount kit required)

Power Requirements

- Input voltage: 12 Vdc, max 1A
- Power adapters for 115Vac, 230Vac, 24Vdc and -48Vdc
- Power consumption: max 5W

Sales Code

- >195226 1021 2ETH-4P HWA 230VAC
- >195231 1021 2ETH-4P ISDN-2BRI HWA 230VAC (with ISDN)
- >201179 1022 E1 HWA 230VAC
- >205117 1022 E1 ADM 2ETH-4P LE 230VAC
- >201186 1023 SERIAL HWA 230VAC
- >205121 1023 SERIAL 2ETH-4P LE 230VAC

