

1020 LE Router Series



The 1020 LE Router Series belongs to the entry level series of routers for secure LAN data connectivity over leased access lines. They offer an integrated Ethernet switch and a high routing performance. 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 LE ROUTER SERIES

The OneAccess 1020 LE 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 LE 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 LE Router Series is part of the family of TDRE compliant products (Total Dynamic Routing Engine). It includes all features to build IP VPN connections with quality of service over leased line, Frame Relay and MPLS networks. With a routing performance of approximately 60,000 pps and a built-in hardware accelerator for encryption, the 1020 LE Router Series is capable of routing at wire speed without compromise even with performance demanding requirements like access lists and the stateful inspection firewall.

1022 LE ROUTER

The 1022 LE Router has a 2 Mbps 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, an ISDN PRI for data, a E1 or a channelised E1. The latter offers multiple logical interfaces on one physical port. A second E1 interface can be used for an add and drop multiplexing mode whereby part of the E1 is dropped off to the router and the remaining 64kbit/s time slots are forwarded to another location.

1023 LE 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.

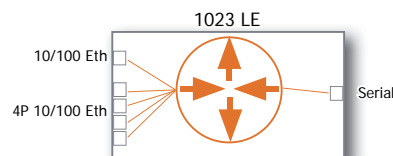
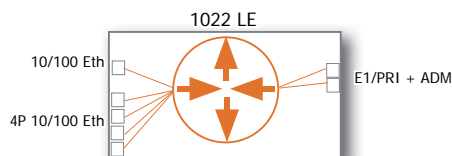
FEATURES AND MANAGEMENT

The 4 port Ethernet switch supports both Ethernet and VLAN switching modes. An additional Ethernet interface can be used to separate secured and non secured data on the local area network, to separate company servers from the local area network through a DMZ (Demilitarised Zone) or for back-up over a second operator's network.

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 1020LE 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 LE 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

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

G703 interface (1022 LE version)

- Applicable standards: ITU-T G.703, G.704, G.706, G.775, G.823, G.826
- Data rate: 2.048kBit/s \pm 50ppm, co-directional
- Coding: HDB3
- Impedance: 120 Ohm balanced
- Transparent 2Mbit/s and G.704 framed E1
- Channelised E1 and ISDN PRI
- Add-and-drop (ADM) on 64kbps time-slots (with the second G703 interface)
- 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
- ATM in accordance with ITU-T G.804

Serial interface (1023 LE 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

Sales Codes

- >205117 1022 E1 ADM 2 ETH-4P LE 230 VAC
- >205121 1023 SERIAL 2 ETH-4P LE 230 VAC

PRI interface (1022 LE version)

- Applicable standards: I.420, I.412, I.430, I.440 (= Q.920), I.441 (= Q.921), I.450 (= Q.930), I.451 (= Q.931)
- 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: 50 kpps
- Number of Frame Relay DLCIs: 200
- Number of ATM PVCs: 31
- 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
- WAN1 / LNK: WAN interface physical layer status
- WAN1 / ACT: WAN interface protocol status
- WAN2 / LNK: second G703 interface physical layer status
- WAN2 / ACT: second G703 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: 600 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 5.5W

