

# CROCUS ROUTER 2M



## FEATURES & BENEFITS

- > SINGLE PORT HIGH-PERFORMANCE 2 MBPS ROUTER
- > AVAILABLE WITH SERIAL INTERFACE (X.21, V.35, V.36, RS-232, RS-530) OR FRACTIONAL E1 (G.703)
- > COMPATIBLE WITH ALL MAJOR ROUTER MANUFACTURERS
- > PPP, FRAME-RELAY AND X.25 ENCAPSULATION
- > STATIC AND RIP-2 ROUTING
- > NAT, PAT, DHCP
- > LIFETIME FREE SOFTWARE UPGRADES
- > CONFIGURATION AND MAINTENANCE SOFTWARE INCLUDED

## > THE CROCUS 2M ROUTER HIGH-SPEED ACCESS ROUTER OFFERS A COST EFFECTIVE SOLUTION FOR REALISING LAN CONNECTIVITY FOR SMALL AND MEDIUM SIZE END USER NETWORKS.

Through its versatile serial WAN interface, it can connect to almost any leased line transport infrastructure.

The router comes with a classical serial interface like X.21, V.35, V.36 (RS-449), RS-232 and RS-530, or also with a (fractional) G.703 E1 interface.

The latter allows the user to map the routed traffic into any number of selected time-slots, offering the largest possible flexibility for the interconnection to a G.704 based Digital Access Cross Connect System (DACCS) or an SDH backbone.

The use of Frame-Relay or X.25 encapsulation allows the router to interface seamlessly with any frame relay or X.25 network. This is illustrated in the figure below. PPP is more common when realising point-to-point connections.

The unit is designed to support differentiated services based on VPNs (Virtual Private Networks). Therefore it supports features like L2TP (Layer 2 Tunneling Protocol) and QOS (Quality Of Service) based on DiffServ. The unit is designed for integration into demanding network environments and can be controlled by the complete set of network maintenance and management tools as they are described in this catalogue.

### LAN PHYSICAL CHARACTERISTICS

- > Compliant with IEEE 802.3 10Mbps HDX Ethernet
- > RJ45 Unshielded Twisted Pair (UTP)

### WAN PHYSICAL CHARACTERISTICS

#### Serial interface models

- > ISO 2110 (DB25 female): DTE, direct compliant to RS 232, RS-530, RS-530A
  - > Through adapter cable: X.21, V.35, V.36 (RS-449)
  - > Synchronous clocking modes: internal, internal transmit, slave-receive, external
  - > Synchronous internal clock speeds: 64, 128, 256, 512, 1024, 2048 kbps
  - > Asynchronous mode speeds: 9600, 19200, 38400, 57600, 115200bps, CTS flow control
- #### G.703 interface model
- > 120 ohm balanced, RJ45 connector
  - > 75 ohm unbalanced, BNC coaxial connectors
  - > Clocking modes: internal, slave-receive
  - > Support of fractional framed E1 or unframed 2 Mbps

### SUPPORTED LAN PROTOCOLS

- > IP
- > Bridging of other protocols

### SUPPORTED WAN ENCAPSULATION PROTOCOLS

#### Frame-Relay (RFC 1490, RFC2427)

- > Maximum number of Frame-Relay DLCIs: 32
  - > CIR (Committed Information Rate) configurable per DLCI
  - > EIR (Excess Information Rate) configurable per DLCI
  - > Support of Inverse ARP over Frame-Relay for automatic gateway configuration
  - > Support of LMI - Revision 1 LMI
    - ANSI T1.617
    - ITU-T
  - > Max WAN speed: 2 Mbps
- #### PPP (RFC1661, RFC1662)
- > Synchronous or asynchronous operation
  - > Support of Chap authentication with MD5 hashing (RFC 1994)
  - > Max WAN speed: 2 Mbps
- #### X.25
- > Maximum number of X.25 SVCs: 5
  - > Max WAN speed: 128 kbps

### AUTOINSTALL SUPPORT

- > DLCI number configuration: LMI (Frame-Relay only)
- > IP address configuration
  - > BootP client (RFC951)
  - > DHCP client & relay agent (RFC2131, RFC2132)
  - > IPCP (for PPP only)
- > Gateway configuration
  - > Inverse ARP (for Frame-Relay only)
  - > IPCP (for PPP only)

### Full configuration

- > Automatic TFTP configuration download (RFC1350)

### IP ROUTING AND BRIDGING

- > Static routes
- > RIP version 2 with MD5 hashing and authentication (RFC2453)
- > Bridging with spanning tree

### FIREWALL FUNCTIONS

#### Access filtering on LAN and WAN interfaces

- > Source IP Address
- > Destination IP Address
- > Source port number
- > Destination port number
- > IP protocol field

### MAINTENANCE AND MANAGEMENT SUPPORT

- > Local console (command line interface or interactive interface)
- > TELNET (command line interface or interactive interface)
- > TFTP configuration download
- > TMA (Telindus Maintenance Application)
- > HTTP web interface
- > PING
- > SNMP Mib2, private Mib
- > Software flash download
- > TMA CLI stand-alone command line console software\*
- > TMA Element Management software\*
- > TMA for HP OV management integration in HP Openview\*

### ADDITIONAL FEATURES

- > NAT (Network Address Translation)
  - > Dynamic or static IP address conversion
- > PAT (Port Address Translation)
- > DHCP server, relay agent
- > Numbered/unnumbered WAN Interface
- > L2TP tunneling
- > DiffServ COS

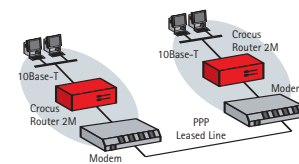
### FRONT PANEL

- > PWR: power
- > LOS/AIS: physical link indication of serial interface
- > 103/TXD: WAN Layer2 status/ data sent to WAN
- > 104/RXD: data received from WAN
- > LAN/TXD: Ethernet status/ data sent to LAN
- > LAN/RXD: data received from LAN
- > COL: collision on LAN

### POWER REQUIREMENTS

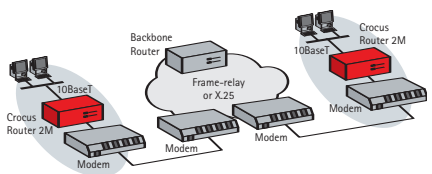
- > 7.5 Vdc, 750 mA with external power adapter
- > External power adapters available for 24/48Vdc and 230Vac
  - \* optional

### POINT-TO-POINT ROUTER CONNECTION



Finally the Crocus 2M Router is equipped with flash memory. As supplementary features become available, the end-user can download free product upgrades.

### CONNECTION THROUGH X.25 OR FRAME RELAY BACKBONE



### SALES CODES

- > 167317 Crocus ROUTER 2M G703 230VAC
- > 183746 Crocus ROUTER 2M RS-530 230VAC

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

MORE INFO:  
TELINDUS  
Geldenaaksebaan 335  
B-3001 Heverlee  
Belgium

TEL +32 16 38 20 11  
FAX +32 16 40 01 02  
E-MAIL [productinfo@telindus.com](mailto:productinfo@telindus.com)  
[www.telindusproducts.com](http://www.telindusproducts.com)

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