

Multiprotocol router with X.21 and ISDN

bintec R4300

- X.21 interface, opt. 2 x X.21
- 2 x ISDN BRI interfaces
- Ethernet switch with 4+1 ports (autosensing, 10/100 Mbps)
- 10 IPSec tunnels, opt. max. 110
- Stateful Inspection Firewall
- Optional X.25
- Frame Relay



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The bintec R4300 IP router is equipped with both X.21 and S0 ports, providing SMEs an X.21 interface. With an optional X.25 license, the router can be upgraded to include a powerful X.25 feature set.

The bintec R4300 is a high-performance IP router designed for small and medium-sized enterprises and can be used as a WAN access router or as a central remote access server. The bintec R4300 already comes complete with two BRI and an X.21 interface. A license can be purchased to activate a second X.21 interface. Other router features include a 4-port switch and a separate DMZ port.



Because the bintec R4300 supports up to two ISDN-BRI and two X.21 interfaces, this router is ideal for use in professional ISDN backup solutions as well as for high-performance X.21 connections. In addition to the connection of local end systems, the integrated 4-port switch can also be used in combination with an external modem for WAN access. The separate DMZ port makes it possible to provide central server services.

The extensive IPSec implementation supports the building of secure VPN infrastructures. The device already comes complete with five active IPSec tunnels. 3DES or AES is used for encryption, while preshared keys or certificates can be used for authentication. It is also easy to integrate a Radius server into the system. A license can be purchased for the activation of additional VPN tunnels including hardware acceleration.

This router also sports an extensive range of software features. The stateful inspection firewall provides protection against attacks from the outside. Content filtering* allows you to block out any Web contents before they reach the internal network. The integrated PPPoE client/server function makes it possible to define user-specific rules for network use, while QoS mechanisms ensure optimum use of the available bandwidth and provide all the services you require. The devices can be configured using either the HTTP Configuration Wizard (recommended for inexperienced users) or via an HTML user interface. The SSH-encrypted communication to the device provides for secure configuration.

* Content Filtering is subject to a fee and is available in a test version for a 30-day trial period.

WLAN Controller, HotSpot and adult content filtering

The router also includes all the functionality of the bintec WLAN Controller. The bintec WLAN controller lets you configure and monitor small- and mid-sized WLAN networks with up to 72 access points. No matter whether you need frequency management with automatic channel selection, loadbalancing across several access points, support for virtual LANs, or virtual wireless network administration (multi-SSID) - you have all these advanced features at your fingertips with the WLAN Controller. The software continually monitors the entire wireless network, notifying administrators of any malfunctions or security threats.

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The router's integrated HotSpot Gateway together is an ideal complement to the WLAN Controller in combination with a bintec HotSpot license, allowing operators to set up a wireless guest network that requires authentication. This secure separation between the guest network and company network is configured through the WLAN Controller and implemented using virtual wireless networks. An additional highlight is the optional Cobion filter which can be used to prevent children and youth from accessing inappropriate content.

Variants

bintec R4300 UK (24513)	IP/serial Router, UK version, $4+1$ port $10/100$ Mbit switch, up to $2xISDN$ -BRI; slot for up to 4 -chanel DSP; PPTP-VPN and 10 IPSec tunnels, HW accelerator and encryption
bintec R4300 (24511)	IP/serial Router, int. version, 4+1 port 10/100 Mbit switch, 2xISDN-BRI, up to 2 serial ports (X.21, V.35, V.36); slot for up to 4-chanel DSP; PPTP-VPN and 10 IPSec tunnels, HW accelerator and encryption

Features

Serial	
Serial interface	X.21, V.35, V.36 for connections up to 2,048 kbps, with channel bundling up to 4 Mbps
Frame Relay	Support for Frame Relay connections
ML-PPP	Channel bundling over Multilink PPP

ISDN		
ISDN protocols	Euro-ISDN and other national ISDN protocols	
Dialup and leased lines (BRI)	Leased lines supported: D64S, D64S2, TS02, D64S2Y	
B channel protocols	Excellent interoperability with other manufacturers (Raw HDLC, CISCO HDLC, X.75)	
PPP, ML-PPP	(See Software)	
X.31 over CAPI	X.25 within ISDN B- and D-channel	
CAPI	CAPI 2.0 with CAPI user concept (password for CAPI use)	
Bit rate adaption	$V.110\ (1,200\ up\ to\ 38,400\ bps),\ V.120\ up\ to\ 57,600\ kbps\ (HSCSD)$ for connection to GSM subscribers	

Security		
NAT/PAT	Network & Port Address Translation / Stateful Packet Inspection: Isolation of complete network from public access	
CLID and callback	Calling Line Identification (CLID), callback	
Access lists	Filtering of IP packets according to different criteria (source, destination, port and interface)	
Stateful Inspection Firewall	Filtering with monitoring and interpretation of the status of the individual connections	

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Security		
RADIUS	Central check of access authorization at a RADIUS server (PPP and Login Authentication)	
TACACS+	Support of TACACS a security application that provides centralized validation of users	
Authentication	PPP mechanisms (see Software)	
Content filtering	30 day evaluation licence	
VLAN	Network nodes in different network segments behave like a arbitrary group connected to the same network segment	
Encryption for PPP	MPPE up to 128 bit other up to 168 bit	
VPN - IPSec	10 tunnels inclusive, 50 more via separate licenses	
VPN - IPSec	Powerful encryption up to 256 bits (AES, 3DES, DES, CAST, Blowfish, Twofish)	
VPN - IPSec	Callback: Transmission of dynamic IP address in D or B channel; free-of-charge licence necessary	
VPN-IPSec DPD	Dead Peer Detection for IPSec tunnel	
VPN - PPTP	integrated	
VPN - PPTP	Strong encryption up to 128 bits (MPPE), up to 168 bits (DES/3DES, Blowfish)	
DynDNS / DynVPN	Router can still be reached over the Internet in spite of dyn. IP address	
IKE for IPSec	Pre-Shared Keys and X.509 certificate support	
X.509	X.509 v1/v3 certificates (PKCS#7/8/10, 12, CLRs, SCEP)	
QoS for IPSec	Available	
PKI Support for IPSec	Available	
NAT Traversal for IPSec	Available	
IPCOMP	IP Compression	
IPSec / RADIUS	Available	
IPSec Redesign	Policy manager and interface concept	
L2TP	layer 2 tunneling protocol for ATM, Ethernet, PPP; user authentication	
GRE	V.0 according RFC 2784 for common encapsulation	
Hardware Encryption	factory default: 3DES, AES and RC4	

Software	
TCP/IP routing	Routing information updating and distribution, static or dynamic (RIP $v1/v2$ /triggered, RFC 2091), selectable for each interface, ProxyARP, BOOTP/DHCP forwarding
Extended IP routing	Dependent on source/destination port, source IP address, TOS, i.e. policy-based routing
X.25 Enhanced	Optional: X.25 over ISDN, XOT, X.25 to TCP Gateway, X.25 PAD, TP0 Bridge
OSPF	Static/dynamic updating and distribution of routing information
Bridging	Transparent Mode
QoS	Quality of Service with DiffServ and shaping: breakdown of IP data traffic into classes with different priorities, optimized queue handling and shaping as per these priorities
TCP Download Rate Control	Optimal for VoIP transmission

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Software		
BRRP	Bintec Router Redundancy Protocol, back up a service offered by a single physical router to a LAN (Virtual Router)	
IP load balancing	Bandwidth management	
BoD	Bandwidth on Demand: Scalable bandwidth to suit data traffic load	
AUX backup	Backup via GSM, GPRS or analogue modem	
PPP	Authentication mechanisms (PAP, CHAP, MS-CHAP, MS-CHAP v2), standard PPP, channel bundling over Multilink PPP (ML-PPP), transparent mode, dynamic IP address assignment (server and client mode)	
PPPoE	Point-to-Point Protocol over Ethernet (Client and Server) for high-speed Internet access over xDSL (RFC 2516)	
LAN user - ISDN WAN partner	Unlimited number	
Dyn. IP addresses	Simple Internet access without fixed IP addresses	
ISDN accounting	Call detail recording, number, charging information,	
IP accounting	Source, destination, port, interface, packets/bytes counter	
Event Scheduler	Budgets based on data volume or based on time	
Short hold	Static and dynamic short hold saves connection costs through automatic call clearing	
Keep Alive Monitoring	Saves costs by only allowing a connection to be set up if configurable IP addresses can be reached	
STAC	Compression for PPP connections, free-of-charge licence necessary	
Cost of ownership	Minimum, e.g. due to free software updates, full remote administration	

Administration / Management	
ISDN logging	ISDN event & system logging: recording of all relevant connection data, e.g. intrusion attempts
SNMP	Complete management with MIB-II, Enterprise MIB, inclusive SNMP management software for Windows (DIME Tools and Browser)
SSH login	Secure connections for terminal applications
Local / remote administration	Complete configuration and maintenance, local and remote, over Ethernet, ISDN Login or serial interface
Trace / debugging / monitoring	Traces for ISDN B-/D-channel, R-CAPI traces, Ethernet traces, reason for call break, ISDN signaling information
Email alert	Available
DHCP	Server and client for simplified configuration for TCP/IP
Setup Tool	Integrated, menu-based, intuitive setup program, standard for the whole bintec product portfolio
HTML Setup Tool	HTML interface accessible through a Java Script enabled browser
HTML Wizard	Browser-based configuration assistant
XADMIN	Roll out tool for larger router installations (IP+ISDN)
Activity Monitor	Controls router activities from each LAN PC

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Administration / Management	
Documentation	Complete toolset and documentation on CD
Guarantee	2-year manufacturer"s guarantee

Hardware		
RISC architecture	Motorola 8241 RISC processor with 32 MB RAM	
Flash ROM	8 MB on board	
4+1-port switch	4+1-port autosensing 10/100 Mbps Ethernet switch	
ISDN	2 x BRI (4 B channels)	
Serial interface	$1\ x$ serial interface (X.21 / V.35) , opt. additional $1\ x$ serial interface via license	
Console	Serial console port: RS 232 C, RJ45, 1,200 bps - 115 kbps	
Power supply	External AC/DC converter 15 V AC, 1,24 A (approx. 1,5 W per internal ISDN-Bus)	
On/off switch	Available	
Status LEDs	Power, Status, 10 x Ethernet, 8 x Function (ISDN, ADSL, WLAN,)	
Housing	Metal housing	
19-inch	Optional: suitable for mounting in 19-inch cabinet via a 19-inch rack-mount kit	
Fanless design	Long lifetime	
Dimensions	Approx. 295 x 45 x 160 mm (W x H x D)	

Accessoires

Hardware Licenses	
R4300-X21 (24566)	License 2nd X.21interface for R4300

Software Licenses	
R4x00-IPSEC25 (24559)	Additional 25 IPSec tunnel license for R4x00 series
R4x00-X25 (24562)	Full X.25 feature set for R4100 and R4300
Cobion Content Filter Medium (80552)	Cobion content filter for R4100, R4300, list price for one year

Add-ons	
RXXXXx/UTM1100-19-ZOLL-KIT (01443)	Rack-mount cabinet for use with RXXXXx (e.g. R1200 (w/wu), R3000w, etc. not for R230 or R232 products) and UTM1100 $$
ETHERNET/CONSOLE SPLITTER (01488)	Ethernet/Console splitter cable for R-Serie (R1xxxx, R3xxxx, R4xxx)
PS-EURO-Rxxxx/WI-Series (01503)	Power supply EURO for R1200/w/wu, R3x00/w, R4x00, WI series, WI-Client (24V DC, 1A)

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Add-ons	
PS-EURO/UK/INT-Rxxxx/WI-Series (01504)	International wide range power supply (input 110-230V; output: DC 24V, 1.25A) for R1xxxx/R3xxx/R4xxx/WI series with exchangeable power plug (EU, UK, USA)

Cables	
X4C-V.35-DTE (14075)	V.35 DTE cable 4m, Mini Delta Ribbon 26-pole to V.35 (male)
X4C-X.21-DTE (14076)	X.21 DTE cable f4m, Mini Delta Ribbon 26-pole to D-Sub 15 (male)
X4C-X.21-DCE (14077)	X.21 DCE cable 4m, Mini Delta Ribbon 26-pole to D-Sub 15 (female)