

IP ACCESS ROUTER



Professional Gigabit-Ethernet-Router

bintec RS123

- 5x Gigabit-Ethernet
- SFP Port
- 5x IPSec tunnels (optional 30 channels), HW acceleration
- Web based configuration
- Prepared for IPv6
- Flexible mounting: Desktop or 19" Rack
- Stateful Inspection Firewall



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The bintec RS123 is a powerful Gigabit Ethernet router predominately used in SMEs and for providing connectivity to branch locations and home offices.

Product description

The RS123 is a powerful Gigabit Ethernet router predominately used in SMEs and for providing connectivity to branch locations and home offices.

The RS123 delivers advanced security, flexibility, and exceptional performance across a wide range of applications. This router boasts a fan-less metal housing, offers long-term reliability for business-critical applications, and makes an ideal access router for small and mid-sized enterprises (SMEs), branch locations, and home offices.

Thanks to the included 19-inch rackmount conversion bracket, customers can easily integrate this model into 19-inch server racks or operate it on the desktop. Rack mounting is further simplified by the device height of exactly one rack unit and the integrated power supply.

The bintec RS123 also provides five Gigabit Ethernet ports which can be independently configured for use in a LAN, WAN, or DMZ. The RS123 also comes with an SFP slot for optical fibre expansion modules, e.g. for connecting to an optical fibre broadband connection.

The included five licenses for hardware-accelerated IPSec tunnels provide comprehensive high-speed VPN functionality and allow for secure connections to branch locations and off-site employees. An LTE(4G) or UMTS(3G) USB modem (stick) connected to the USB port can be used as a remote configuration access and as a backup interface.

With its wide range of WAN connectivity options, the RS123 raises the bar for flexibility among access routers.

Smart design

The fan-free metal housing is a proven, rugged design that has set bintec devices apart from the competition for years. The integrated power supply and 19" conversion bracket now also make it easy to install in a 19" rack.

Maximum performance

The bintec RS123 is based on a powerful platform with unrivaled capabilities. High speed interfaces handle heavy local network traffic with ease. You can even establish links between separate company locations over secure, encrypted VPN tunnels.

Airtight security

The bintec RS123 not only delivers outstanding performance, it also provides a comprehensive range of security features. With five simultaneous IPSec channels available, you can establish secure links between branch locations, subsidiaries, and home offices. Optional the quantity of VPN tunnels can be extended to 30 tunnels. The integrated IPSec implementation in bintec routers allows the use of pre-shared keys as well as digital certificates as recommended by

Germany's Federal Office for Information Security. This lets you use a public key infrastructure and ensures maximum security. An object-oriented stateful inspection firewall offers packet filtering to provide additional protection against attacks.

Professional management

A graphical user interface is the primary means of configuring the router. This fast, web-based interface makes it easy to set up routers using the integrated configuration wizard. Administrators can also manage the devices locally or remotely using configurable telnet, SSH, ISDN login, or GSM dial-in. The bintec DIME Manager is a free software tool that allows administrators to manage up to 50 devices at once.

Ready for the future

Businesses can easily integrate the RS123 into existing company networks. This bintec router also allows for a gradual migration to the new IPv6 internet protocol. The SFP slot for optical fibre expansion modules enables connection to the highspeed optical fibre broadband of the future. Therefore, the professional-grade bintec RS123 router is a sound investment in your organization's future.

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 12 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.

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

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|-------------------------------------|--|
| bintec RS123-UK (5510000372) | IP Access Router; Desktop device with 19" Rackmounting; incl. 5 IPSec tunnel (opt.30), certificates, HW-encryption; 4+1 Gigabit Eth. switch; USB (Typ B); USB Port; SFP Modul Slot; UK Version |
| bintec RS123 (5510000340) | IP Access Router; Desktop device with 19" Rackmounting; incl. 5 IPSec tunnel (opt.30)), certificates, HW-encryption; 4+1 Gigabit Eth. switch; USB (Typ B), USB Port; SFP Modul Slot; dt. and intern. Version |

Features

| Routing | |
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| Policy based Routing | Extended routing (Policy Based Routing) depending of diffent criteria like IP protocols (Layer4), source/destination IP address, source/destination port, TOS/DSCP, source/destination interface and destination interface status |
| RIP | Support of RIPv1 and RIPv2, separated configurable for each interface |
| Multicast IGMP Proxy | For easy forwarding of multicast packets via dedicated interfaces |
| Multicast inside IPsec tunnel | Enables the transmission of multicast packets via an IPsec tunnel |
| Extended RIP | Triggerd RIP updates according RFC 2091 and 2453, Poisoned Rerverse for a better distribution of the routes; furthermore the possibility to define RIP filters for each interface. |
| Multicast IGMP | Support of Internet Group Management Protocol (IGMP v1, v2, v3) for the simultaneous distribution of IP packets to several stations |

| Protocols / Encapsulations | |
|----------------------------|---|
| PPP/MLPPP | Support of Point to Point Protocol (PPP) for establishing of standard PPP connections, inclusive the Multilink extension MLPPP for the bundeling of several connections |
| Packet size controlling | Adaption of PMTU or automatic packet size controlling via fragmentation |
| PPPoE (Server/Client) | Point-to-Point Protocol over Ethernet (Client and Server) for establisching of PPP connections via Ethernet/DSL (RFC 2516) |
| DNS | DNS client, DNS server, DNS relay and DNS proxy |
| PPPoA | Point to Point Protocol over ATM for establishing of PPP connections via ATM/DSL |
| DYN DNS | Enables the registering of dynamic assigned IP addresses at adynamic DNS provider, e.g. for establishing of VPN connections |
| IPoA | Enables the easy routing of IP via ATM |
| DNS Forwarding | Enables the forwarding of DNS requests of free configurable domains to assigned DNS server. |
| DHCP | DHCP Client, Server, Proxy and Relay for siplified TCP/IP configuration |
| MLPPPoE (Server/Client) | Multilink extension MLPPPoE for bundeling several PPPoE connections (only if both sides support MLPPPoE) |

| Quality of Service (QoS) | |
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| DiffServ | Priority Queuing of packets on the basis of the DiffServ/TOS field |
| Bandwidth reservation | Dynamic reservation of bandwidth, allocation of guaranteed and maximum bandwidths |
| TCP Download Rate Control | For reservation of bandwidth for VoIP connections |
| Policy based Traffic Shapping | Dynamic bandwidth management via IP traffic shaping |
| Layer2/3 tagging | Conversion of 802.1p layer 2 prioritisation information to layer 3 diffserv attributes |
| Warranty | 2 year manufacturer warranty inclusive advanced replacement |

Quality of Service (QoS)

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| Software Update | Free-of-charge software updates for system software (BOSS) and management software (DIME Manager) |
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Redundancy / Loadbalancing

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| VPN backup | Simple VPN backup via different media. Additional enables the bintec elmeg interface based VPN concept the application of routing protocols for VPN connections. |
| Load Balancing | Static and dynamic load balancing to several WAN connections on IP layer |
| BoD | Bandwidth on Demand: dynamic bandwidth to suit data traffic load |
| BRRP | Optional: Bintec Router Redundancy Protocol for backup of several passive or active devices with free selectable priority |

Layer 2 Functionality

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| Proxy ARP | Enables the router to answer ARP requests for hosts, which are accessible via the router. That enables the remote clients to use an IP address from the local net. |
| Bridging | Support of layer 2 bridging with the possibility of separation of network segment via the configuration of bridge groups |
| VLAN | Support of up to 256 VLAN (Virtual LAN) for segmentation of the network in independent virtual segments (workgroups) |

Interfaces

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| SFP slot | SFP slot for conventional optical 10/100/1000 Mbps Ethernet SFP module |
| Ethernet | 5 x 10/100/1000 Mbps Ethernet Twisted Pair, autosensing, Auto MDI/MDI-X, up to 4 ports can be switches as additional WAN ports incl. load balancing, all Ethernet ports can be configured as LAN or WAN. |
| USB 2.0 host | USB 2.0 full speed host port for connecting LTE(4G) or UMTS(3G) USB sticks (supported sticks: see www.bintec-elmeg.com) |
| USB-Console | Service-Interface USB 2.0 plug B (driver: see www.bintec-elmeg.com) |

Hardware

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| Status LEDs | Power, Status, 10 * Ethernet, USB, SFP |
| Realtime clock | System time persists even at power failure for some hours. |
| Wall mounting | Integrated in housing |
| Desktop operation | Possible, rubber pad included the package |
| Environment | Temperature range: Operational 0°C to 40°C; storage -25°C to 70°C; Max. rel. humidity 10 - 95% (non condensing) |
| Protection Class | IP20 |

Hardware

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|------------------------------|---|
| Power supply | Internal power supply 110-240V 1.5 A, with energy efficient switching controller; complies with EuP directive 2008/28/EC |
| Power consumption (idling) | Less than 5 Watt |
| Housing | Metal case, opening for Kensington lock, prepared for wall mounting |
| Dimension | Ca. 265 mm x 40 mm x 170 mm (W x H x D) |
| Fan | Fanless design therefore high MTBF |
| Reset button | Restart or reset to factory state possible |
| Function Button | Supported from Release 9.1.10 |
| Standards and certifications | R&TTE directive 1999/5/EG; EN 55022; EN 55024 + EN 55024/A1; EN61000-3-2; EN 61000-3-3; EN 61000-4-4; EN 60950-1; EN 300 328; EN 301 489-17; EN 301 489-1; EN 301 893 |

Content of Delivery

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| Ethernet cable | 1 Ethernet cable, 2m |
| Safety Instructions | Safety Instructions |
| 19" brackets and screws | Two 19" brackets for the switch panel mounting |
| Installation Poster | Guide for the Installation |
| Power cable | Power Plug 100-240V / 1,5 A |

VPN

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| Number of VPN tunnels | Inclusive 5 active VPN tunnels with the protocols IPSec, PPTP, L2TP and GRE v.0 (also in combination possible). Optional router extension up to 30 simultaneous utilisable VPN tunnel via license. |
| PPTP (PAC/PNS) | Point to Point Tunneling Protocol for establishing fo Virtual Privat Networks, inclusive strong encryption methods with 128 Bit (MPPE) up to 168 Bit (DES/3DES, Blowfish) |
| GRE v.0 | Generic Routing Encapsulation V.0 according RFC 2784 for common encapsulation |
| L2TP | Layer 2 tunnelling protocol inclusive PPP user authentication |
| IPSec | Internet Protocol Security establishing of VPN connections |
| IPSec Algorithms | DES (64 Bit), 3DES (192 Bit), AES (128,192,256 Bit), CAST (128 Bit), Blowfish (128-448 Bit), Twofish (256 Bit); MD-5, SHA-1, RipeMD160, Tiger192 Hashes |
| IPSec hardware acceleration | Integrated hardware acceleration for IPSec encryption algorithms DES, 3DES, AES |
| IPSec IKE | IPSec key exchange via preshared keys or certificates |
| IPSec IKE Config Mode | IKE Config Mode server enables dynamic assignment of IP addresses from the address pool of the company. IKE Config Mode client enables the router, to get assigned dynamically an IP address. |
| IPSec IKE XAUTH (Client/Server) | Internet Key Exchange protocol Extended Authenticaion client for login to XAUTH server and XAUTH server for logging of XAUTH clients |
| IPSec IKE XAUTH (Client/Server) | Inclusive the forwarding to a RADIUS-OTP (One Time Password) server (supported OTP solutions see www.bintec-elmeg.com). |

| VPN | |
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| IPSec NAT-T | Support of NAT-Traversal (Nat-T) for the application at VPN lines with NAT |
| IPSec IPComp | IPSec IPComp data compression for higher data throughput via LZS |
| IPSec certificates (PKI) | Support of X.509 multi-level certificates compatible to Microsoft and Open SSL CA server; upload of PKCS#7/8/10/12 files via TFTP, HTTP, LDAP, file upload and manual via FCI |
| IPSec SCEP | Certificates management via SCEP (Simple Certificate Enrollment Protocol) |
| IPSec Certificate Revocation Lists (CRL) | Support of remote CRLs on a server via LDAP or local CRLs |
| IPSec Dead Peer Detection (DPD) | Continuous control of IPSec connection |
| IPSec dynamic IP via ISDN | Transmission of dynamic IP address in ISDN D or B channel; free-of-charge licence necessary |
| IPSec dynamic DNS | Enables the registering of dynamic IP addresses by a dynamic DNS provider for establishing a IPSec connection. |
| IPSec RADIUS | Authentication of IPSec connections at a RADIUS server. Additionally the IPSec peers, which were configured on a RADIUS server, can be loaded into the gateway (RADIUS dialout). |
| IPSec Multi User | Enables the Dial-in of several IPSec clients via a single IPSec peer configuration entry |
| IPSec QoS | The possibility to operate Quality of Service (traffic shaping) inside of an IPSec tunnel |
| IPSec NAT | By activating of NAT on an IPSec connection it is possible, to implement several remote locations with identical local IP address networks in different IP nets for the VPN connection |
| Number of IPSec tunnels | Inclusive 5 active IPSec tunnels (expandable to 30 tunnels) |

| Security | |
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| NAT/PAT | Symmetric Network and Port Address Translation (NAT/PAT) with randomly generated ports inclusive Multi NAT (1:1 translation of whole networks) |
| Policy based NAT/PAT | Network and Port Address Translation via different criteria like IP protocols, source/destination IP Address, source/destination port |
| Policy based NAT/PAT | For incoming and outgoing connections and for each interface variable configurable |
| Content Filtering | Optional ISS/Cobion Content filter (30 day test license inclusive) |
| Stateful Inspection Firewall | Packet filtering depending on the direction with controlling and interpretation of each single connection status |
| Packet Filter | Filtering of IP packets according to different criteria like IP protocols, source/destination IP address, source/destination port, TOS/DSCP, layer 2 priority for each interface variable configurable |

| Logging / Monitoring / Reporting | |
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| Internal system logging | Syslog storage in RAM, display via web-based configuration user interface (http/https), filter for subsystem, level, message |
| External system logging | Syslog, several syslog server with different syslog level configurable |
| E-Mail alert | Automatic E-Mail alert by definable events |

Logging / Monitoring / Reporting

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|-----------------------|---|
| SNMP traps | SNMP traps (v1, v2, v3) configurable |
| IPSec monitoring | Display of IPSec tunnel and IPSec statistic; output via web-based configuration user interface (http/https) |
| Interfaces monitoring | Statistic information of all physical and logical interfaces (ETH0, ETH1, SSIDx, ...), output via web-based configuration user interface (http/https) |
| IP accounting | Detailed IP accounting, source, destination, port, interface and packet/bytes counter, transmission also via syslog protocol to syslog server |
| RADIUS accounting | RADIUS accounting for PPP, PPTP, PPPoE and ISDN dialup connections |
| Keep Alive Monitoring | Control of hosts/connections via ICMP polling |
| Tracing | Traces can be stored in PCAP format, so that import to different open source trace tools (e.g. Wireshark) is possible. |

Administration / Management

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| RADIUS | Central check of access authorization at one or several RADIUS server, RADIUS (PPP, IPSec inclusive X-Auth and login authentication) |
| RADIUS dialout | On a RADIUS server configured PPP und IPSec connection can be loaded into the gateway (RADIUS dialout). |
| TACACS+ | Support of TACACS+ server for login authentication and for shell comando authorization |
| Time synchronization | The device system time can be obtained via ISDN and from a SNTP server (up to 3 time server configurable). The obtained time can also be transmitted per SNTP to SNTP clients. |
| Automatic Time Settings | Time zone profiles are configurable. That enables an automatic change from summer to winter time. |
| Supported management systems | DIME Manager, XAdmin |
| Configurable scheduler | Configuring of time and event controlled tasks, e.g. reboot device, activate/deactivate interface, activate/deactivate WLAN, trigger SW update and configuration backup |
| Configuration Interface (FCI) | Integrated web server for web-based configuration via HTTP or HTTPS (supporting self created certificates). This user interface is by most of bintec elmeg GmbH products identical. |
| Software update | Software updates are free of charge; update via local files, HTTP, TFTP or via direct access to the bintec elmeg web server |
| Remote maintenance | Remote maintenance via telnet, SSL, SSH, HTTP, HTTPS and SNMP (V1,V2,V3) |
| GSM remote maintenance | Remote maintenance via GSM login (external USB UMTS (3G) modem required) |
| Device discovery function | Device discovery via SNMP multicast. |
| On The Fly configuration | No reboot after reconfiguration required |
| SNMP | SNMP (v1, v2, v3), USM model, VACM views, SNMP traps (v1, v2, v3) configurable, SNMP IP access list configurable |
| SNMP configuration | Complete management with MIB-II, MIB 802.11, Enterprise MIB |

Administration / Management

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| Configuration export and import | Load and save configurations, optional encrypted; optional automatic control via scheduler |
| SSH login | Supports SSH V1.5 and SSH V2.0 for secure connections of terminal applications |
| HP OpenView | Integration into Network Node Manager |
| XAdmin | Support of XAdmin roll out and configuration management tool for larger router installations (IP+ISDN+GSM) |
| Configuration via USB | Configuration interface is available |

Accessoires

Software Licenses

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| RSxx3/Rxx02/RTxx02/RXL-IPSEC25 (5500000781) | Additional 25 IPSec tunnel license for RSxx3, Rxx02, RTxx02 and RXL12xxx series |
| BRRP-RS123x/RS35x-Series (5500001630) | Software License for bintec Router Redundancy Protocol (BRRP) for RS123x and RS35x-series |
| Cobion Content Filter Small (80551) | Cobion content filter for RSxxx, Rxx02, RTxx02 series; R230a(w), R232b(w), TR200, R1200(w/wu), R3000(w), R3400, R3800, R232aw, RV-Series; list price for one year |

Pick-up Service / Warranty Extension

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| Service Package 'small' (5500000810) | Warranty extension of 3 years to a total of 5 years, including advanced replacement for bintec elmeg products of the category 'small'. Please find a detailed description as well as an overview of the categories on www.bintec-elmeg.com/servicepackages . |
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Product Services

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| HotSpotHosting 2yr 1 location (5500000861) | HotSpot solution hosting fee for 2 year and 1 location |
| HotSpotHosting 1yr 1 location (5510000198) | HotSpot solution hosting fee for 1 year and 1 location |
| Additional HotSpot location (5510000199) | Additional location for the HotSpot solution (551000198, 5500000861) valid for one year |

Add-ons

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| bintec SFP-LC-TX/LX/LH (5530000190) | 1000Base-LX SFP-Module for bintec RS123x a. bintec RXL series for connection to fiber optics. Supports 9 µm singlemode fiber (SMF). Wavelength 1310nm. Max. distance 10km |
| bintec SFP-LC-SX (5530000189) | 1000Base-SX SFP-Module for bintec RS123x and bintec RXL series for connection to fiber optics. Supports 62,5 µm and 50 µm multimode fiber (MMF). Wavelength 850nm. Max. distance 275m resp. 550m |

Add-ons

bintec 4GE-LE (5530000119)

LTE (4G)/UMTS (3G) extension device for router; 1x Gbit Eth; Simcard slot;
Wallmounting; PoE Injector inclusive

License WLAN Contr. 6AP (5500000943)

WLAN Controller license for 6 Access Points (APs) or for the extension with 6 APs
for the products: RS123x, RS353xx. Rxxx2 and RXL12x00.