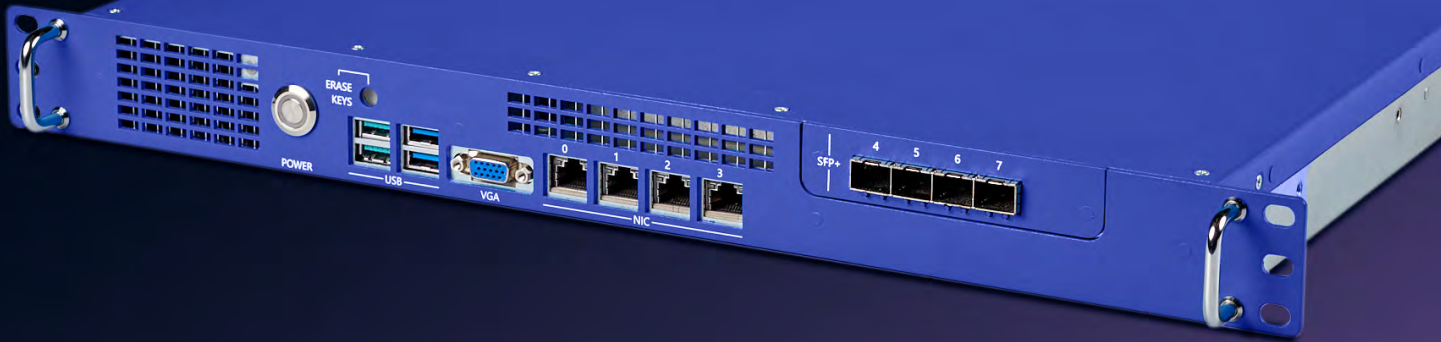


# PROTELION AR5000

Security gateway for channel protection

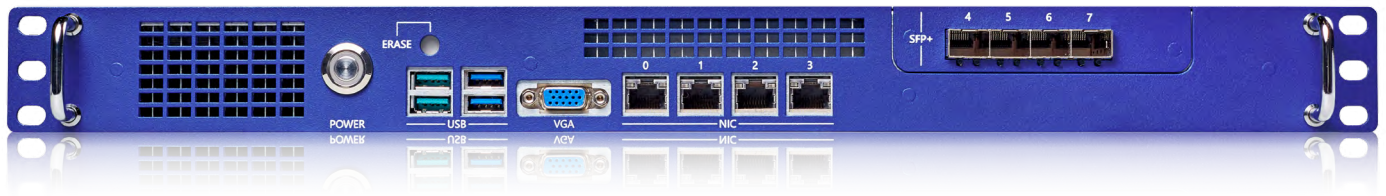


The Protelion AR is our encryption hardware appliance to establish protected communication channels between sites.

Due to its unique features (cryptographic data protection, firewall, integrated network services), the Protelion AR constitutes a versatile solution for protecting corporate networks against unauthorized access to resources when transmitting data over public channels.

## USE CASES

- Secure communication between branches of an organization (site-to-site and multi-site-to-site)
- Protecting backbone links between data centers
- Network protection, also with wireless channels
- Protected access to the corporate network for remote and mobile users
- Protecting multiservice networks (including IP telephony and videoconferencing)
- Differentiated data access in local networks, splitting local networks (for example, creating a DMZ)
- Communicating with Protelion networks of other organizations



## FEATURES

### VPN

- Network-layer gateway (L3)
- Data-link layer gateway (L2 over IP VPN)
- IP address server
- VPN router
- Traffic masking due to encapsulating the traffic to UDP and TCP

### Network functions

- Static routing
- Dynamic routing
- VLAN (dot1q) support
- Channel bonding (EtherChannel, LACP)
- Traffic classification and prioritization (QoS, ToS, DiffServ)

### Firewall

- Stateful firewall
- Separate traffic filtering rules for unencrypted and encrypted IP traffic
- NAT/PAT
- Anti-spoofing
- Proxy server and third-party antivirus

### Integrated services

- DNS server
- NTP server
- DHCP server
- DHCP-Relay
- UPS support
- Failover cluster



## HARDWARE SPECIFICATIONS

Available model	AR5000
Form factor	1 RU
Dimensions (H×W×D)	430×44×435 mm
Weight	8 kg
Power supply configuration	Dual 300W AC
AC input voltage	100 to 240V AC
Power Redundancy	1+1 Hot Swap

## PERFORMANCE

VPN throughput	Up to 6.0 Gbps / 10 Gbps*
L2 over IP VPN throughput	Up to 6.0 Gbps / 10 Gbps*
Number of connected available Protelion devices (tunnels)	2 <sup>16</sup> (65536)
Recommended number of VPN clients (depending on available bandwidth)	Up to 6,000

## Firewall

Firewall throughput (real-world HTTP)	Up to 9.3 Gbps / 13 Mbps*
Max number of concurrent connections	6,500,000

## Network performance

Network interfaces (copper)	4× RJ45 1 Gbps
Network interfaces (optical)	8× SFP+ 10 Gbps
Transceiver (included)	2× Avago AFBR-709SMZ
Wireless interfaces	No

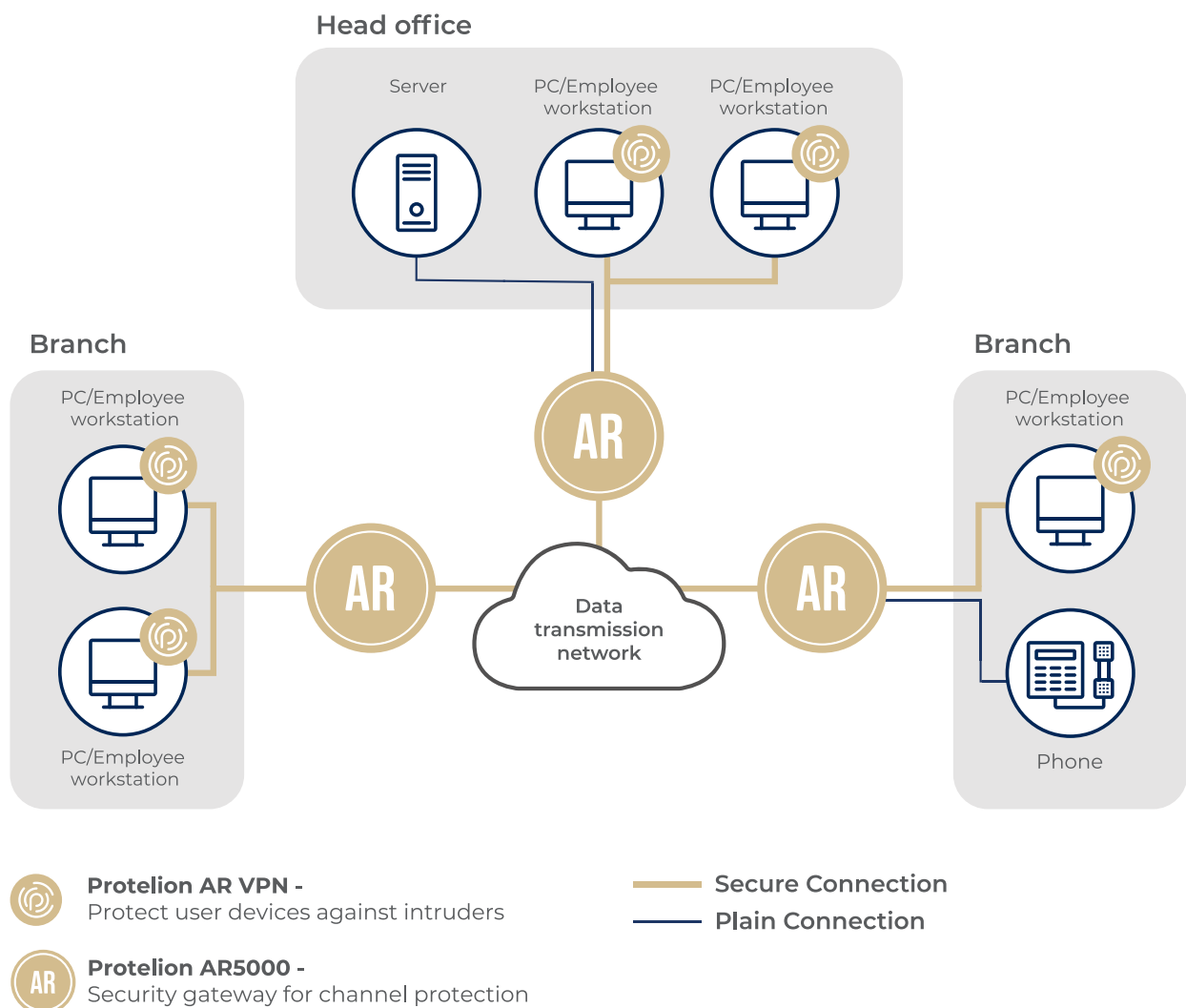
## Availability and reliability

Failover cluster	Yes
Unattended operation 24 × 7	Yes
Power management with an uninterruptible power supply	Yes
MTBF (Mean time between failures)	50,000 hours

\* Network Bonding refers to the combination of network interfaces on one host for redundancy and/or increased throughput.

## ADVANTAGES

- Failover cluster
- Centralized and remote management (SSH, WebUI)
- Unattended operation 24×7
- Tamper Protection
- Support of modern, multiservice networks and full compatibility with:
  - DHCP, WINS, and DNS services
  - Dynamic address translation (NAT, PAT)
  - Multimedia protocols (SIP, H.323, SCCP, and others)



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