

X-Krypton

# X-Kryptor Secures all networks

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## **X-Kryptor** Secures all networks

## Why choose X-Kryptor?

The X-Kryptor family of network security appliances allows secure connection of your organisation's sites and remote access users, protecting your data against external attack and disclosure of sensitive information. X-Kryptor enables you to build a cost effective network and communications infrastructure without compromising the high levels of security you demand.

- Add strong encryption to all IP networks, including Broadband, ADSL, Wi-Fi, Bluetooth, GPRS/3G, Satellite and Microwave networks.
- Extend your LAN by building secure site-to-site links using existing public network infrastructures such as the Internet.
- Provide secure remote access for your home-based and mobile users with X-Kryptor Secure Clients.
- X-Kryptor scales as your network grows.
- Manage security across your entire network from a single point.
- Approved by CESG for UK Government use.



X-Kryptor is a multi-role, Dynamic VPN network security appliance that combines the highest levels of government approved security with the flexibility to operate in a huge variety of network topologies. X-Kryptor integrates with Broadband, ADSL, Wireless LAN (Wi-Fi), Satellite, Microwave, GPRS/3G and Bluetooth, operating across any local or wide area network - including the Internet.

The X-Kryptor family consists of a range of hardware based network security appliances and Secure (software) Clients, available across a range of mobile and desktop operating systems. Whether you are a small organisation with 25 or fewer users, a large government enterprise or a department supporting thousands of users, the X-Kryptor family has a solution to fit your network.

## How does X-Kryptor work?

Using the highly secure Advanced Encryption Standard (AES) algorithm with a choice of 128,192 or 256 bit keys, X-Kryptor encrypts all traffic being sent or received across any WAN or LAN. Further cryptographic protection is provided via a signed Diffie-Hellman key exchange mechanism. Keys can be configured to renegotiate automatically based on set time periods or data throughput volumes, according to the exact security policy of your organisation.

X-Kryptor is approved by CESG under the CAPS security evaluation scheme and provides Baseline approval for RESTRICTED data over an unclassified network, or CONFIDENTIAL data over a restricted network. It has been chosen to secure the most sensitive environments, including areas within the MoD, Central Government, law enforcement, the health sector and commercial organisations. X-Kryptor is totally flexible, fitting in with the way you want your network to operate. It seamlessly works alongside other security products such as your firewall or intrusion detection system (IDS).

When choosing network security products you need a solution that will grow with your network. The extensible design of X-Kryptor means that as the number of users on your network increases, you can add and configure extra X-Kryptors simply and quickly. The management of your network security and VPN access is a key concern. X-Kryptor includes simple-to-use management software that is browser-enabled, allowing you to manage security across your organisation from a central point anywhere on the network.



## **Secure Networks**

X-Kryptor site-to-site Dynamic VPN solutions enable organisations to securely connect head offices with branch and remote offices using public networks such as the Internet. Inexpensive and readily available third party network infrastructure products can be used to seamlessly extend secure LAN's across cities, countries or even continents.



Smaller organisations that have previously found connecting offices expensive and time consuming can now use inexpensive and readily available Broadband access products such as ADSL.

Security concerns associated with using the Internet to connect your sites are addressed by X-Kryptor's built-in encryption engine. X-Kryptor creates secure tunnels between your sites, protecting your data from disclosure. In addition to strong encryption and authentication, X-Kryptor Stealth mode further increases your site-to-site network security by preventing gateway X-Kryptors from acknowledging unsolicited traffic. This feature allows the device to remain hidden from all unauthorised users or attackers.

In order to maximise flexibility and simplify configuration of your site-to-site VPN, X-Kryptor includes Dynamic VPN technology, providing information security without reference to IP addresses. This feature dramatically increases the manageability of your WAN, enabling your organisation to add secure sites and scale your network without having to re-configure security association parameters.



## **Secure Remote Access**

In today's flexible working environment, many organisations find that allowing their employees to work part or full-time from home offers tremendous productivity benefits. Keeping your remote users connected to your network is critical, but for those users working with protectively marked or commercially sensitive documents the security risks of using public networks, such as the Internet or mobile telephone networks, are often too great to justify.

X-Kryptor Secure Client technology enables you to build secure remote access solutions using common, easily available and inexpensive ISP services. X-Kryptor Secure Clients add a layer of strong encryption to common mobile communications devices and are compatible with most desktop and mobile operating systems.

X-Kryptor Secure Clients include Lockdown mode to further increase security. In Lockdown mode, remote access clients will not communicate with ANY other IP service in the unclassified network. Similar to a personal firewall, this feature allows the client to remain hidden from attackers and prevents the user from communicating with anything other than the X-Kryptor protecting your central site.

No two organisations have exactly the same remote access requirements and to address this X-Kryptor offers two different remote access Dynamic VPN solutions. Both solutions can be operated simultaneously on the same remote access network giving you enormous flexibility when designing your remote access infrastructure.

## **Home-based Workers**

Allows your home users to use inexpensive and flexible Broadband technologies such as ADSL, cable based Internet or PSTN to connect to your network from home.

### **Mobile Workers**

Users away from the office can stay connected to your network by using their portable computers, PDA's and mobile phones, or by using Internet connections offered by many hotels and airports.



## **Secure Wi-Fi**

Wireless LAN (Wi-Fi) based networks are fast becoming a standard feature of modern networks. The rapid increase in wireless hotspots and technology adoption from major laptop vendors mean the popularity of Wi-Fi will increase further.



The security risks of using wireless LAN's are well documented, and although security is improved in the more recent wireless standards, there is still a large gap between the levels of security found in conventional wired networks. By using X-Kryptor Secure Clients, your organisation can implement an office-based wireless LAN with the same high levels of security as a traditional network.

The solution consists of X-Kryptor Secure Client software placed on your users' PC's and an X-Kryptor network security appliance connected directly behind your wireless access point. All data transmitted over the wireless LAN is encrypted using strong encryption, meaning that commonly used Wi-Fi hacking tools cannot be used to gain access to your LAN.

Remote or travelling users can also benefit from this solution by allowing them to access your core network services from public Wi-Fi hotspots without compromising security. All data communications are encrypted before they are transmitted, eliminating all the vulnerabilities common to wireless LAN's in public places.

## **X-Kryptor Technical Services**

With five strategically placed service centres, Barron McCann's comprehensive, nationwide IT services operation is amongst the best in the industry.

Our in-house X-Kryptor Technical Services Team is familiar with carrying out implementations in highly secure, sensitive environments; including the MoD, Central Government, law enforcement, the health sector and commercial organisations.

## **The X-Kryptor Family**



## **Product Specifications**

#### **Data Encryption Algorithms**

AES (128, 192, 256 bit), Diffie-Hellman Public Key Exchange, SHA-1 (FIPS PUB 180-1) Secure Hash Standard, DSS, DSA (FIPS PUB 186-2) Digital Signature Standard, X-Kryptor x509v3 Digital Certificate

#### **Encryption Modes**

Transport Mode, Tunnel Mode

## Authentication

Includes RSA ACE Agent

#### **Security Approvals**

CESG Approved Products Scheme (CAPS) at Baseline, Defence Infosec Product Co-operation Group (DIPCOG) Approval for UK MoD use

#### Interface

Dual 100/10Base-TX Ethernet Interface

#### **Display** 132 x 32 pixel backlit LCD Display Panel

Input control Multi-function front panel joystick \*

Regulatory Approvals CE Mark, EMC - EN55022 Class B, Safety - EN60950

#### **Dimensions**

X-Kryptor 25 & 100: Standard 19" Rack mountable chassis (1U) Depth 311mm X-Kryptor Lite: Width 200mm Height 54mm Depth 260mm

#### Ratings

100-250v 50-60 Hz, 0.5A - 1.5A

#### Environmental

Operating Temperature: 10°c to 45°c, Operating Humidity: (non condensing) 30% to 90% RH

\* X-Kryptor 25 and 100 models only.



With over twenty five years experience in data communications, Barron McCann is expert in the design and manufacture of high assurance security products. X-Kryptor was designed in co-operation with the United Kingdom Government National Technical Authority for information assurance, CESG.

Barron McCann employs 350+ people, spread across a nationwide network of offices and service centres. The company is ISO9001 registered, an active supporter of Investors in People and a founder member of The National Training Organisation for Electronics and Software Services.



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