Technolution
Prime

PrimeLink 3015+

Reliable NL Restricted line encryptor with remote management

Redefining **solutions**

Use the PrimeLink 3015+ to create, manage and monitor secure connections across open networks, including the internet. This line encryptor has been cleared for use at NL Restricted level in the Netherlands and at EU and NATO Restricted level in EU and NATO member states. When there is no threat from APTs (Advanced Persistent Threats), the PrimeLink 3015+ with firmware 2.0 is also deployable for CONFIDENTIAL. Thanks to its integrated FPGA technology, new functionality can be added to the PrimeLink 3015+ via firmware updates, making the device particularly future-proof. To give one example: a recent update has made the PrimeLink 3015+ quantum resilient, protected against future attacks by quantum computers.

Secure connections due to separation of concerns
In accord with our design philosophy of 'separation of concerns', the PrimeLink 3015+ has been made to do one thing only: create optimally secure connections. This means the PrimeLink 3015+ carries out as few of the surrounding network equipment's tasks as possible, and works together seamlessly with your existing devices and within your existing network configuration.

User-friendly due to online management and monitoring
User-friendliness is paramount. You can add or change the network configuration of your PrimeLink 3015+ remotely. Also, it is possible to add new functionalities even after physical installation, such as a bandwidth of 10 Gb/s instead of the standard speed of 1 Gb/s. In addition, you can remotely access monitoring data related to the connections.

Wide range of possible applications
The PrimeLink 3015+ is suited for almost every network configuration, from mesh networks with multiple locations to multi-client environments with multiple back-up data centers. Thanks to the available software clients, the PrimeLink 3015+ can also be used for secure connections with employees who work from home.

Releases of firmware-updates PrimeLink 3015+

Resistant against attacks by state actors

It is more important than ever for your organization to have secure connections. Cyber attacks are becoming increasingly sophisticated, and attackers are often actively supported by state actors, so that they can invest a lot of time and means in their attacks. Our aim is to protect society against such state-backed threats. Technolution Prime products have been designed to resist attacks by state actors.

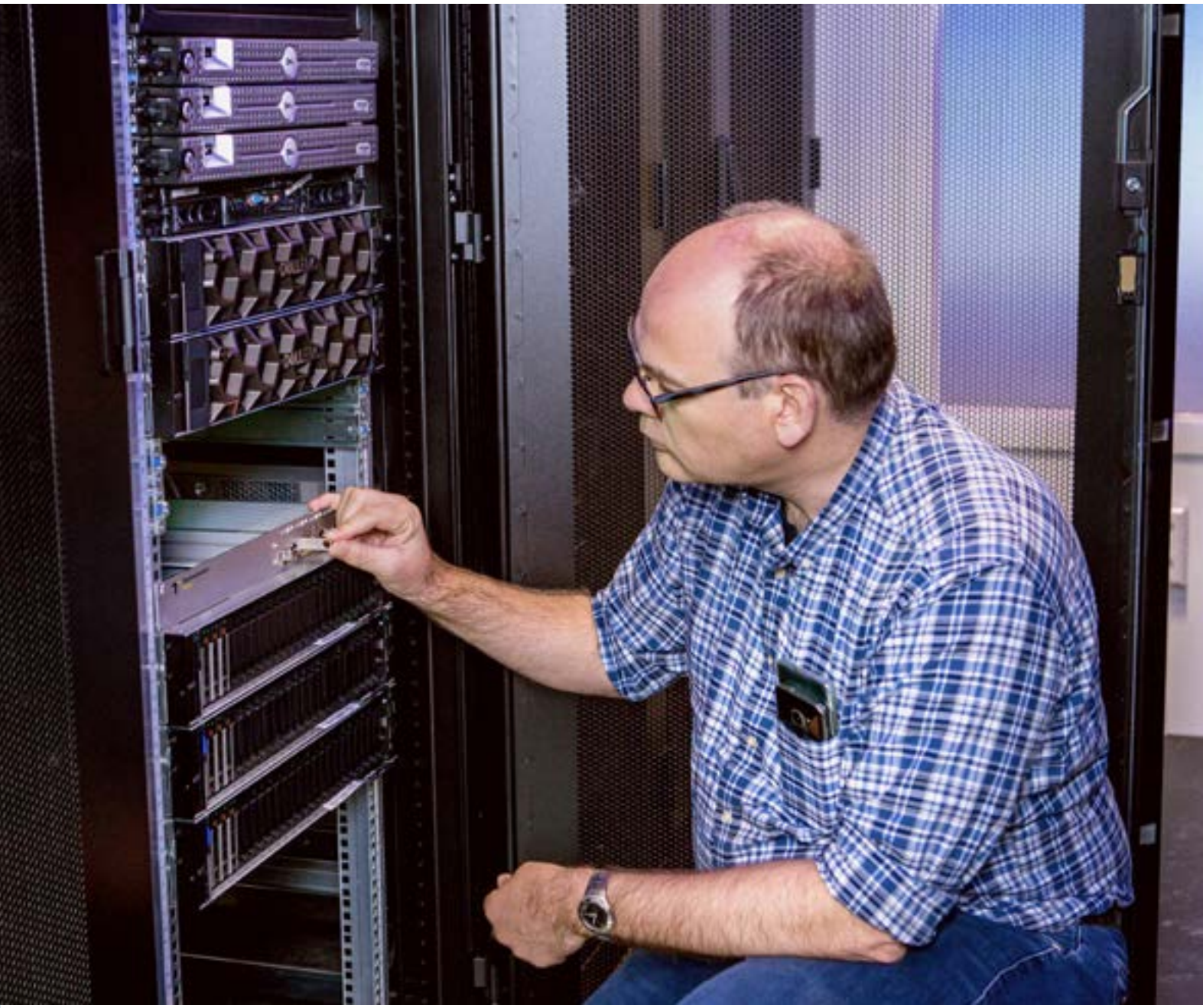
Future-proof, simple and cost-effective

Technolution has developed the PrimeLink 3015+ in close collaboration with the Dutch Ministry of Defense. The PrimeLink 3015 meets the demand for a simple, cost-effective and user-friendly line encryptor. As it uses reprogrammable chips (FPGAs), the PrimeLink 3015+ is able to respond dynamically to your security requirements as they develop over time. The current PrimeLink 3015+ runs on version 2.0.2.0 of the firmware. This version offers quantum resilience, optional online management and monitoring, and an optional bandwidth of 10 Gb/s. This is the second firmware update since the PrimeLink 3015 was released in 2018.

The advantages of the PrimeLink 3015+ in a row

- Secure connections for classification levels up to and including NL Restricted, including threats from state actors (BBN3).
- As of firmware v2.0 deployable for CONFIDENTIAL if no APTs.
- Based on the OpenVPN-NL protocol and therefore compatible for use with software clients.
- Suited for most current network configurations.
- Rapid deployment; activation of additional functionalities possible after installation.
- Remote implementation of new or changed configuration, including network configuration*.
- Secure connection directly to the open Internet - no additional firewalls required.
- Future-proof – activation of new features through remote firmware upgrades.
- Online access to monitoring data relating to the status of the connections*.
- Quantum Resilient.
- High speeds of 1 Gb/sec to 10 Gb/sec*.
- Cleared by the Dutch National Communications Security Agency (NBV).
- Cleared for use at Restricted level in EU and NATO members states*.

* *Depending on the license chosen*



Standard

- Evaluated for NL RESTRICTED
- Internationally evaluated for EU RESTRICTED and NATO RESTRICTED
- Deployable on layer 2 (Ethernet) and layer 3 (IP)
- Based on OpenVPN-NL
- Deployable to CONFIDENTIAL if there are no APTs (from v2.0)
- 1 Gb/s speed
- Quantum resilient
- Offline monitoring

License based

- Online monitoring (replaces the offline license)
- 10 Gb/s speed (upgrade from 1Gb/s)

Other

- Warranty extension from 1 to 5 years
- Training

Technische specificaties

	PrimeLink 3015+
Security	
Certification	NLD RESTRICTED EU RESTRICTED (V1.0.4.0) NATO RESTRICTED NLD Confidential without APTs (V2.0.0.0)
Hardware protection	Tamper evident and tamper responsive
Tempest	NATO SDIP-27/1 Level B
VPN	
Protocol	OpenVPN – UDP
Encryption	AES-256-GCM *(Before V2.0.0.0: AES-256-CBC/HMAC-SHA-256)*
Number of tunnels	128
Tunnel routing	Longest Prefix Matching (L3) / VLAN-ID (L2)
Control channel protection	TLS-Crypt V2 authentication & encryption *(up to V 1.0.4.0. TLS-authentication)*
Operation behind NAT	Yes
Mode	L2 (tap), L3 (tun)
Performance	
Maximum throughput	Electrical > 950 Mbps Optical > 950 Mbps or > 9.5 Gbps*
ICMP	ICMPv4 too big (automatic MTU tuning)
MTU size	Jumbo frames: 12.000 bytes
Latency	Typical < 50 µs
Management	
API	Open API to connect to own management interface
Network diagnostics	VPN keep alive, Tunnel status, peer device detection
Key management	Domain Administration System (DAS)
Monitoring*	Statistics via SNMP or REST API, remote logging (via rsyslog)
Remote management*	Via open REST API (i.e. update application, reboot)
Time synchronization*	NTP (for log time stamps)
Interfaces	
Trusted network	1000BASE-T, SFP+ cage (1G, 10G)
Untrusted network	1000BASE-T, SFP+ cage (1G, 10G)
Management *	100BASE-T
CIK	USB mass storage device
Hardware	
Regularly compliance	RoHS, CE
Power	~22 W *(with 10G data pipeline enabled)*
Power input	90 – 264 V-AC, 0,5 A, 47-63 Hz (Redundant power)
Clock retention	>5 year unpowered @ 0°C - 40°C
Cooling	Passive
Weight	1.8 kg
Dimensions desktop	165 x 270 x 38 mm (WxDxH)1 19" rack: 1 U, 270 mm deep
Temperatures Operating	0°C - 35°C ambient
Storage	-30°C - 85°C

**Afhankelijk van de gekozen licentie*

09.2024

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About Technolution Prime

Technolution Prime is the leader in the Netherlands in preventive high assurance solutions for classified data. We develop our products and solutions entirely in-house. We stand for high quality cyber security where it is needed most.

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