

# PKI Appliance by PrimeKey

# PKI Appliance Model comparison

PrimeKey PKI Appliance offers a complete feature set needed to operate full blown, highly available PKI. It is based on EJBCA Enterprise, with easy to use management functions, high-performance hardware and HSM. PrimeKey PKI Appliance offers the easiest and most efficient way to deploy an enterprise PKI system without the hassles of complex installation and integration procedures.



# PKI Appliance Model Comparison

PKI Functionality	S	M	L
Including EJBCA Enterprise	✓	✓	✓
Common Criteria EAL 4+ certified component	✓	✓	✓
Certificate Authority functionality with unlimited number of CAs	✓	✓	9
Support for operating multiple, independent PKI hierarchies within one installation	✓	✓	
Registration Authority with role based access control and approval mechanisms	✓	✓	✓
Validation Authority supporting CRL distribution and OCSP	-	✓	✓
Highly flexible integration interface based on web services	-	✓	✓
Support for CMP v2 RFC 4210	-	✓	✓
Support for SCEP	-	✓	✓
Support for real-time certificate data synchronization between CA and VA instances (Peer Connector)	-	✓	✓
Cryptographically protected audit log, recording all security events		✓	✓
Optional SignServer add-on for document, data and code signing	-	On request	On request

Appliance platform	S	M	L
Easy to use web based installation wizard	✓	✓	✓
Web based appliance administration interface	✓	✓	✓
Easy to use update mechanism for firmware and application software	✓	✓	✓
Build in backup and restore functionality	✓	✓	✓
Support for smart card based protection for backups (M-out-of-N)	✓	✓	✓
Support for smart card protected crypto token activation	✓	✓	✓
Remote logging (syslog) support including system and audit log	✓	✓	✓
SNMP monitoring	✓	✓	✓
Mail notification service	✓	✓	✓
Support for 2 and 3 node cluster setups offering fail-over or high availability	-	✓	✓
Field-upgradable storage space	On request	On request	-
Field-upgradable issuance performance	On request	-	-
Option to integrate Third Party Virtual Machines on the underlying Security Platform	-	On request	On request

Hardware	S	M	L
Built in FIPS 140-2 level 3 certified HSM	✓	✓	✓
Reset-to-Factory defaults mechanism including secure key zeroization	✓	✓	✓
Dual Gigabit Ethernet ports with separation of management and application networks	✓	✓	✓
Redundant, field-replaceable power supply	✓	✓	✓
Included PIN pad and 10 Smart Cards	-	✓	✓
Support for external HSM backup batteries (availability Q2 2016)	✓	✓	✓
External battery adapter included (availability Q2 2016)	✓	-	-

Support and maintenance	S	M	L
SLA Standard	✓	✓	✓
SLA Premium	On request	On request	On request
One Time HW+ (advanced hardware replacement)	-	On request	On request

## Performance overview

Certificate capacity	S	M	L
Number of supported certificates	< 1000	8 Mill	20 Mill

Issuance performance with activated audit log (certs/sec)	S	M	L
RSA-1024 SHA1WithRSA	5	28	28
RSA-2048 SHA256WithRSA	1	26	26
RSA-4096 SHA512WithRSA	0,5	9	9
EC secp256r1 SHA256withECDSA	5	25	25
EC secp384r1 SHA384withECDSA	4	24	24
EC secp521r1 SHA512withECDSA	3	23	23

Issuance performance with deactivated audit log (certs/sec)	S	M	L
RSA-1024 SHA1WithRSA	30	101	101
RSA-2048 SHA256WithRSA	10	79	79
RSA-4096 SHA512WithRSA	0,5	11	11
EC secp256r1 SHA256withECDSA	43	98	98
EC secp384r1 SHA384withECDSA	21	95	95
EC secp521r1 SHA512withECDSA	9	88	88

## OCSP performance overview

OCSP performance with deactivated audit log (responses/sec)	S	M	L
RSA-1024 SHA1WithRSA	-	450	450
RSA-2048 SHA256WithRSA	-	80	80
RSA-4096 SHA512WithRSA	-	11	11
EC secp256r1 SHA256withECDSA	-	490	490
EC secp384r1 SHA384withECDSA	-	380	380
EC secp521r1 SHA512withECDSA	-	190	190

## Technical Specifications

### Dimensions

- Height: 88,4mm (2 HU)
- Width: 430mm (19")
- Depth: 633mm
- Weight: 12.5kg (27,5 lb)

### Interfaces

- 4 x USB 2.0 (2 on the front panel, 2 on the rear side)
- 2 x 1 GBit Ethernet (RJ45)
- 1 x VGA (DB15)
- 2 x PS2 Mouse & Keyboard
- Serial Port (DB9)

### Power Supply

- Redundant 2 x 500W, typical efficiency
- > 80% 110/240V, 50/60Hz

### Power Consumption

- Typical 80W Maximum 135W

### Environmental Temperature

- Operation +10°C to +50°C (+50°F to 122°F)
- Storage -10°C to +55°C (+14°F to 131°F)

### Conformity

- CE, RoHS, FCC

### Shipping dimensions

- Height: 247mm (9,73")
- Width: 582mm (22,91")
- Depth: 766mm (30,16")
- Shipping weight: 17 kg (37,5lb)

### Supplied Accessories

- Rack mounting rails
- US and EU Power Cords
- Smart card reader
- 10 smart cards

## About PrimeKey

PrimeKey Solutions AB is one of the world's leading companies for PKI solutions. PrimeKey has developed successful solutions, such as EJBCA Enterprise, SignServer Enterprise and PrimeKey PKI Appliance. PrimeKey is a pioneer in open source security software that provides businesses and organisations around the world with the ability to implement security solutions such as e-ID, e-Passports, authentication, digital signatures, unified digital identities and validation. PrimeKey has its head office in Stockholm, Sweden.

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