

PKI Appliance by PrimeKey

PKI Appliance Model specification

With PrimeKey PKI Appliance, you will get your PKI projects done in time and on budget. PrimeKey's purpose-built PKI Appliance is the all-in-one solution for a Public Key Infrastructure with built-in high availability and reliable functionality. It provides a ready to use EJBCA Enterprise with an integrated Hardware Security Module (HSM) and a comprehensive management interface.



PKI Appliance Model Specification

PrimeKey PKI Appliance is the easiest and most efficient way to deploy and manage an enterprise PKI system. With a pre-packaged solution, you are quickly up and running without the hassles of complex installation and integration procedures.

PrimeKey PKI Appliance offers the complete feature set needed to operate a comprehensive, highly available PKI. It is based on PrimeKey EJBCA Enterprise, with easy-to-use management functions, high-performance hardware and a built-in FIPS 140-2, Level 3, certified Hardware Security Module (HSM).

Depending on your requirements, PrimeKey offers five different PKI appliance models to address different needs. All models include EJBCA Enterprise with a core library for Certificate Authority (CA), Registration Authority (RA) and Validation Authority (VA) functionality capable of hosting an unlimited number of CAs. EJBCA Enterprise is Common Criteria certified.

Extra small (XS)

PKI Appliance XS is the smallest hardware appliance with support for up to 1,000 certificates. PKI Appliance XS is ideal for an offline Root CA in a PKI deployment.

Small (S)

This is your PKI start environment—EJBCA with everything you need. PKI Appliance S supports the operation of multiple, independent PKI hierarchies with one installation. In addition, this model includes Registration Authority (RA), functionality and highly flexible integration interfaces

based on web services, REST API and support for ACME, CMP v2 RFC 4210, SCEP, EST. This model supports up to 1 M certificates. The model Small can be easily upgraded to Medium. Many customers are utilizing this model for test or lab environments.

Medium (M)

Start with model Medium if you already know that you need more certificates and better certificate issuing capacity. This model supports up to 15 million certificates.

Large (L)

PKI Appliance model Large has better certificate issuing performance and it manages more certificates. If you have one or a couple of use cases that need a lot of certificates and you expect more use cases in the near future that will need certificates, then you should choose model Large. PKI Appliance L supports up to 60 million certificates.

Extra Large (XL)

PKI Appliance XL is suited for extremely large PKI deployments with the need for more than 100 million certificates. It has the same certificate issuing performance as model Large, but supports up to 160 million certificates and has an upgraded storage.

PKI Appliance	Extra Small	Small	Medium	Large	Extra Large
Software stack: PrimeKey EJBCA Enterprise & Prime LFS	✓	✓	✓	✓	✓
Protocols & API's					
OCSP	-	-	-	-	-
SCEP	-	✓	✓	✓	✓
CMP	-	✓	✓	✓	✓
EST	-	✓	✓	✓	✓
ACME	-	✓	✓	✓	✓
WebServices API	-	✓	✓	✓	✓
REST API	-	✓	✓	✓	✓
Key Features					
Certificate Capacity*	Up to 1 K	Up to 1 M	Up to 15 M	Up to 60 M	Up to 160 M
Secure & Automated Backup Mechanism	✓	✓	✓	✓	✓
2 Factor Authentication	✓	✓	✓	✓	✓
FIPS 140-2 Level 3 validated HSM inside	✓	✓	✓	✓	✓
Dedicated Mng & App Interfaces	✓	✓	✓	✓	✓
Redundancy	-	✓	✓	✓	✓
Dual power supply	✓	✓	✓	✓	✓
SNMP, Syslog, Audit Log	✓	✓	✓	✓	✓
Accessories					
SmartCards	Not included	Not included	10	10	10
PinPad Reader	Not included	Not included	1	1	1
External Battery adapter	✓	✓	✓	✓	✓
Performance (opp/sec)	Cert. issuance				
	Audit log on/off				
RSA 2048 SHA 256 with RSA	1/10	1/10	26/79	21/114	21/114
RSA 4096 SHA 512 with RSA	0,5/0,5	0,5/0,5	9/11	21/114	21/114
EC secp256r1 SHA256withECDSA	5/43	5/43	25/98	21/109	21/109
EC secp384r1 SHA384withECDSA	4/21	4/21	24/95	20/106	20/106
EC secp521r1 SHA512withECDSA	3/9	3/9	23/88	20/102	20/102
Technical specifications					
Form Factor	2U				
Dimensions	88,4 x 430 x 633mm (3 1/2 x 17 x 25 inch)				
Weight	12,5kg (27.5lb)				
Operational Environment	+10°C - +50°C (+50°F - 122°F)				
Storage Environment	-10°C - +55°C (+14°F - 131°F)				
Safety Agency Approval	CE, RoHS, FCC				
Power Supply	Dual 300W				
AC Power	110/240V, 50/60Hz				
Power Consumption	Idle 80W, max 135W				

For testing purposes, it is possible to run CA, VA and RA on one single instance of the appliance.

* = Based on EJBCA Version 7.3.x, audit log on, typical key sizes (RSA 2048 SHA 256 with RSA), typical subject dn length: 100 characters.

For the latest specification details, see doc.primekey.com

About PrimeKey

PrimeKey is one of the world's leading companies for PKI solutions and has developed successful solutions, such as EJBCA Enterprise, SignServer Enterprise, PKI Appliance and PrimeKey SEE. As a pioneer in open source security software, PrimeKey provides businesses and organizations around the world with the ability to implement security solutions, such as e-ID, e-Passports, authentication, digital signatures, unified digital identities and validation. Our products are Common Criteria and FIPS certified. We have numerous Webtrust/ ETSI and eIDAS audited installations, and our internal processes are ISO 9001, 14001, and 27001 certified.

PrimeKey has offices in Stockholm, Sweden; San Mateo, USA; Aachen, Germany; and Melbourne, Australia. Together with our global network of technology and reselling partners, we are proud to count many of the industry leading companies and institutions within IT, Telecom, Banking, Industrial, Public CAs, and different branches of government as our long-time customers.

Contact

sales@primekey.com

www.primekey.com

Europe: +46 873 561 00

USA: +1 (855) 583-7971

© PrimeKey Solutions AB

All rights reserved

PrimeKey Headquarters
Sundbybergsvägen 1
SE-171 73 Solna
Sweden

PrimeKey Labs
Krantzstr. 7
52070 Aachen
Germany

C2 – A PrimeKey company
951 Mariners Island Blvd
San Mateo, CA 94404
USA

Crypto Workshop – A PrimeKey company
520 Bourke Street, Level 2
Melbourne, VIC 3000
Australia

