

Asymmetric Encryption Algorithm	Key Length (in Bits)	Description
DH	512, 1024, 2048, 3072, 4096	The Diffie-Hellman algorithm is a public key algorithm invented in 1976 by Whitfield Diffie and Martin Hellman. It allows two parties to agree on a key that they can use to encrypt messages they want to send to each other. The security of this algorithm depends on the assumption that it is easy to raise a number to a certain power, but difficult to compute which power was used given the number and the outcome.
Digital Signature Standard (DSS) and Digital Signature Algorithm (DSA)	512 - 1024	DSS was created by NIST and specifies DSA as the algorithm for digital signatures. DSA is a public key algorithm based on the ElGamal signature scheme. Signature creation speed is similar with RSA, but is 10 to 40 times as slow for verification.
RSA encryption algorithms	512 to 2048	Developed by Ron Rivest, Adi Shamir, and Leonard Adleman at MIT in 1977. It is an algorithm for public-key cryptography that is based on the current difficulty of factoring very large numbers. It is the first algorithm known to be suitable for signing as well as encryption, and one of the first great advances in public key cryptography. Widely used in electronic commerce protocols, and is believed to be secure given sufficiently long keys and the use of up-to-date implementations.