AES Encryption and Buckeye Cam Products
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The Advanced Encryption Standard (AES) is a specification for the encryption of electronic data established by the U.S. National Institute of Standards and Technology (NIST). AES has been adopted by the U.S. Government and is now used worldwide. AES became effective as a federal government standard on May 26, 2002 after approval by the Secretary of Commerce.

Three different key lengths are used: 128, 192 and 256 bits. In June 2003, the U.S. Government announced that AES could be used to protect classified information. All key lengths are suitable for protection of classified information up to the SECRET level.

All Buckeye Cam wireless devices and bases support AES encryption when applicable. The following table lists the encryption type for each product and the process for enabling it.

Product	Connection	Type	Enabled	Comments
X80 Camera	RF signal to base	AES-128	By default	Default key can be changed via software
X80 Echo	RF signal to base	AES-128	By default	Default key can be changed via software
X80 Activator	RF signal to base	AES-128	By default	Default key can be changed via software
X80 PC Base	USB to computer	-	Not applicable	Direct connect to computer. Encryption not necessary.
X80 Cell Base	TCP/IP to computer	AES-128	With firmware update	Default key can be changed by connecting with USB
X80 Net Base	TCP/IP to computer	AES-128	With firmware update	Default key can be changed by connecting with USB
Orion Camera	RF signal to base	AES-256	With SD card	Key programmed onto SD card. Card is inserted into the camera. Camera is power-cycled and then card can be removed.
Orion PC Base	USB to computer	-	Not applicable	Direct connect to computer. Encryption not necessary.
Orion Cell Base	TCP/IP to computer	AES-128	With firmware update	Default key can be changed by connecting with USB
Orion Net Base	TCP/IP to computer	AES-128	With firmware update	Default key can be changed by connecting with USB