

[Discover Packages](#) > [Standard library](#) > [crypto](#) > [aes](#) 

aes

package

standard library

Version: [go1.20.1](#) **Latest** | Published: Feb 14, 2023 | License: [BSD-3-Clause](#) | Imports: 9 |

Imported by: 21,908

Details

[✓ Valid go.mod file](#)  [✓ Redistributable license](#)  [✓ Tagged version](#) [✓ Stable version](#) [Learn more](#)

Repository

cs.opensource.google/go/go

Links

[🛡️ Report a Vulnerability](#) Documentation 

<> Documentation

Rendered for [linux/amd64](#) 

Overview

Package aes implements AES encryption (formerly Rijndael), as defined in U.S. Federal Information Processing Standards Publication 197.

The AES operations in this package are not implemented using constant-time algorithms. An exception is when running on systems with enabled hardware support for AES that makes these operations constant-time. Examples include amd64 systems using AES-NI extensions and s390x systems using Message-Security-Assist extensions. On such systems, when the result of NewCipher is passed to cipher.NewGCM, the GHASH operation used by GCM is also constant-time.

Index

Constants

[func NewCipher\(key \[\]byte\) \(cipher.Block, error\)](#)[type KeySizeError](#)[func \(k KeySizeError\) Error\(\) string](#)

Constants

[View Source](#)

```
const BlockSize = 16
```

The AES block size in bytes.

Variables

This section is empty.

Functions

func [NewCipher](#)

```
func NewCipher(key []byte) (cipher.Block, error)
```

NewCipher creates and returns a new cipher.Block. The key argument should be the AES key, either 16, 24, or 32 bytes to select AES-128, AES-192, or AES-256.

Types

type [KeySizeError](#)

```
type KeySizeError int
```

func (KeySizeError) [Error](#)

```
func (k KeySizeError) Error() string
```



Source Files

[View all](#) [↗](#)

[aes_gcm.go](#)
[block.go](#)

[cipher.go](#)
[cipher_asm.go](#)

[const.go](#)
[modes.go](#)

Why Go

[Use Cases](#)

[Case Studies](#)

Get Started

[Playground](#)

[Tour](#)

[Stack Overflow](#)

[Help](#)

Packages

[Standard Library](#)

[About Go Packages](#)

About

[Download](#)

[Blog](#)

[Issue Tracker](#)

[Release Notes](#)

[Brand Guidelines](#)

[Code of Conduct](#)

Connect

[Twitter](#)

[GitHub](#)

[Slack](#)

[r/golang](#)

[Meetup](#)

[Golang Weekly](#)

[Copyright](#)

[Terms of Service](#)

[Privacy Policy](#)

[Report an Issue](#)



[Google](#)