

[Open Peer Review on Qeios](#)

# Ampere

National Cancer Institute

## Source

National Cancer Institute. *Ampere*. NCI Thesaurus. Code C42536.

A unit of electric current, one of the seven base units of the International System of Units (Système International d'Unités, SI). It is that constant current which, if maintained in two straight parallel conductors of infinite length and zero diameter separated by one meter in a vacuum, would produce between these conductors a force equal to  $2 \times 10^{-7}$  newton per meter of length. This is dependent upon the definitions of the meter, kilogram, and second. One ampere represents  $6.24 \times 10^{18}$  unit electric charge carriers, such as electrons, passing a specified fixed point in one second.