

COMMON FUNDAMENTAL PHYSICAL CONSTANTS (C4)

| <i>Constant</i> | <i>Constant Symbol</i> | <i>Numerical Value</i> |
|-------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------|
| <i>Unperturbed Ground State Hyperfine Transition Frequency of the Caesium 133 Atom</i> | $\Delta\nu_{\text{Cs}}$ | 9 192 631 770 Hz |
| <i>Speed of Light in Vacuum</i> | c | 299 792 458 m/s |
| <i>Planck Constant</i> | h | $6.626\,070\,15 \times 10^{-34} \text{ J s}$ |
| <i>Elementary Charge</i> | e | $1.602\,176\,634 \times 10^{-19} \text{ C}$ |
| <i>Boltzmann Constant</i> | k | $1.380\,649 \times 10^{-23} \text{ J/K}$ |
| <i>Avogadro Constant</i> | N_{A} | $6.022\,140\,76 \times 10^{23} \text{ mol}^{-1}$ |
| <i>Luminous Efficacy of Monochromatic Radiation of Frequency $540 \times 10^{12} \text{ Hz}$</i> | K_{cd} | 683 lm/W |
| <i>Standard Acceleration of Gravity</i> | g_n | $9.806\,65 \text{ m/s}^2$ |
| <i>Molar Mass Constant</i> | M_u | $0.999\,999\,999\,65(30) \times 10^{-3} \text{ kg/mol}$ |
| <i>Pi</i> | π | 3.141 592 653 589 793 |

Notes:

- Pi (π) is an irrational number with a supposed infinite number of decimal places, the first 12 decimal places provided are recommended for use by NASA in a large number of applications. If a larger number of decimal places are required, they are readily available from many online locations. For most non-sensitive calculations, the value of pi can be considered as the numerical value 3.

Sources:

- Constant ^{[1] [2] [4]}
- Constant Symbol ^{[1] [2] [4]}
- Numerical Value ^{[1] [2] [3] [4]}