

4 Summary of the units of the Universal System of Units Standard

Summarizing the above, the units of the Universal System of Units Standard that have characteristic symbols are listed in Table 2.

Table 2: The units of the Universal System of Units Standard that have characteristic symbols

| Category | Dimension / Item | Symbol | Value | | Comment | | |
|---|---|--|---|---|---|--|--|
| Defining constants | wave number speed action entropy | R_∞ c_0 h k_B | | | \equiv | 12^{-2} | Ω_1/D |
| Non-coherent supplementary constants | elementary electrical quantity total solid angle of a hypersphere logarithm of an integer universal mole | e Ω_k B_k mol_u | $\Omega_1 = 2\pi\text{rad}$, $B_1 = \text{bit}$, 132.007729 | $\Omega_2 = 4\pi\text{sr}$ $B_z \equiv \text{digit}_{(12)}$ mol | $k =$ $k =$ | $=$ $=$ | 1, 2, .. 1, z, .. |
| Base units that are natural units | impedance plane angle logarithmic quantity quantity of substance | Ω_n rad neper mol_n | 29.9792458 57.2957795 4.34294482 1 | Ω degree dB | | | |
| Base units that are not natural units | length time energy thermodynamic temperature | m_u s_u J_u K_u | 27.21028842 390.2675219 64.1433465 1.211831 | cm ms mJ K | $12^8 \times$ $12^{16} \times$ $12^{16} \times$ $12^{-4} \times$ | \times \times \times \times | 1 1 12^{-2} 12^{-2} D D/c_0 $\hbar c_0/D$ $\hbar c_0/Dk_B$ |
| Derived units of dynamical quantities | mass work force pressure | g_u W_u N_u P_u | 131.950228 164.357378 235.731961 3.18384692 | g mW mN Pa | $12^{32} \times$ 1 $12^8 \times$ 1 | \times \times \times \times | 12^{-2} 12^{-2} 12^{-2} 12^{-2} $\hbar/c_0 D$ $\hbar c_0^2/D^2$ $\hbar c_0/D^2$ $\hbar c_0/D^3$ |
| Derived units of electromagnetic quantities | charge electrical current field strength flux density | C_u A_u O_u G_u | 28.8965943 74.0430416 272.114137 390.283662 | mC mA mA/m mC/m ² | $12^{16} \times$ 1 $12^{-8} \times$ 1 | \times \times \times \times | 12^{-1} 12^{-1} 12^{-1} 12^{-1} $\sqrt{\hbar/\Omega_n}$ $\sqrt{\hbar/\Omega_n c_0/D}$ $\sqrt{\hbar/\Omega_n c_0/D^2}$ $\sqrt{\hbar/\Omega_n/D^2}$ |