

Fundamental Physical Constants — Electromagnetic constants

Quantity	Symbol	Value	Unit	Relative std. uncert. u_r	
elementary charge	e	$1.602\,176\,6208(98) \times 10^{-19}$	C	6.1×10^{-9}	
	e/h	$2.417\,989\,262(15) \times 10^{14}$	A J ⁻¹	6.1×10^{-9}	
magnetic flux quantum $h/2e$	Φ_0	$2.067\,833\,831(13) \times 10^{-15}$	Wb	6.1×10^{-9}	
conductance quantum $2e^2/h$	G_0	$7.748\,091\,7310(18) \times 10^{-5}$	S	2.3×10^{-10}	
inverse of conductance quantum	G_0^{-1}	12 906.403 7278(29)	Ω	2.3×10^{-10}	
Josephson constant ¹ $2e/h$	K_J	$483\,597.8525(30) \times 10^9$	Hz V ⁻¹	6.1×10^{-9}	
von Klitzing constant ² $h/e^2 = \mu_0 c/2\alpha$	R_K	25 812.807 4555(59)	Ω	2.3×10^{-10}	
Bohr magneton $e\hbar/2m_e$	μ_B	$927.400\,9994(57) \times 10^{-26}$	J T ⁻¹	6.2×10^{-9}	
		$5.788\,381\,8012(26) \times 10^{-5}$	eV T ⁻¹	4.5×10^{-10}	
	μ_B/h	$13.996\,245\,042(86) \times 10^9$	Hz T ⁻¹	6.2×10^{-9}	
	μ_B/hc	46.686 448 14(29)	m ⁻¹ T ⁻¹	6.2×10^{-9}	
	μ_B/k	0.671 714 05(39)	K T ⁻¹	5.7×10^{-7}	
	nuclear magneton $e\hbar/2m_p$	μ_N	$5.050\,783\,699(31) \times 10^{-27}$	J T ⁻¹	6.2×10^{-9}
			$3.152\,451\,2550(15) \times 10^{-8}$	eV T ⁻¹	4.6×10^{-10}
μ_N/h		7.622 593 285(47)	MHz T ⁻¹	6.2×10^{-9}	
μ_N/hc		$2.542\,623\,432(16) \times 10^{-2}$	m ⁻¹ T ⁻¹	6.2×10^{-9}	
	μ_N/k	$3.658\,2690(21) \times 10^{-4}$	K T ⁻¹	5.7×10^{-7}	

¹ See the “Adopted values” table for the conventional value adopted internationally for realizing representations of the volt using the Josephson effect.

² See the “Adopted values” table for the conventional value adopted internationally for realizing representations of the ohm using the quantum Hall effect.