Tables

Table 1 Units with special names and symbols[1]

ALL VALUES DECIMAL

Unit Category		Dimension	The Universal Unit Systems					
			with the Rydberg constant(u)			Harmonic System (h)		
Coherent	base units that are not natural units	length	m_u	272.102883	mm	$m_{h\ or}$ hm²	272.352206	mm
		time	s_u	390.267520	ms	S_h or nc	390.625115	ms
		energy	J_u	64.143275	mJ	J_h	64.084556	mJ
		temperature [3]	K_u	58.441041	μK	K_h	58.387542	μK
	base units that are natural units	plane angle	rad	$(2/\pi)$ arc sin(1)				
		logarithm	neper	log(e)				
		amount of substance	mol_n or N_A^{-1}	mol / 6.02214076×10.²³·				
		impedance	Ω_n or Z_P	29.979245816 Ω (=1sr/(ε0c0) [4], is called 'nohm')				
	derived units of electromagnetic quantities	charge	C_u	28.896578	mC			
		electric current	A_u	74.043001	mA	A_h	73.975219	mA
		field strength	E_u [5]	272.113988	mA/m	E_h	271.616007	mA/m
		flux density	G_u [5]	390.283447	mC/m²	G_h	389.569211	mC/m²
	derived units of dynamical quantities	mass	g_u	131.950082	g	$g_{h\ or}$ ℓℓ	131.829289	g
		power	W_u	164.357196	mW	W_h	164.056415	mW
		force	N_u	235.731701	mN	N_h	235.300301	mN
		Pressure	P_u	3.183843	Pa	P_h	3.172201	Pa

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[1] Please see also http://www.asahi-net.or.jp/~dd6t-sg/univunit-e/units.pdf and https://www.tapatalk.com/groups/dozensonline/the-universal-unit-system-and-its-notaions-t371.html#p4080904 for details. A web-based unit converter is available at http://hosi.org:8080/cgi-bin/conv.cgi . This converter also teaches us the representation of units that belong to various unit systems.

[2] 'harmon(hm)', 'nic(nc)', 'looloh(ℓℓ)', and 'nohm(Ω_n)' constitutes a quartet. These are the alias for common use.

[3] The unit of thermodynamic temperature has been changed. The new unit is one-1,0000;[th] of the old unit in the paper http://dozenal.com along with the introduction of the Earth local extension.

[4] If we adopt the elementary charge as one of the definition constants, Ω_u is used in substitution for Ω_n.

[5] The unit symbol E(Ørsted) and G(Gauß) are associated with the units of CGS unit system. In this paper, we adopt the metric unit names named after the scientists' name as it is. However, an alternative proposal to replace them with the names of the goddesses with the same initials have (i.e., Joule→Juno, Watt→Walküre, Newton→Nereide, Pascal→Polymnia, Coulomb→Clio, Ampere→Aoide, Ørsted→Erato, Gauß→Gaea, Kelvin→Korē) also been proposed.

Non-coherent	defining constants	wave number	R_∞	10,973,731.56816/m (is called 'Rydberg')	
		velocity	c_0	299,792,458 m/s (defined, and is called 'light')	
		action	$\hbar$	$6.62607015 \times 10.^{-34.}$Js/2$\pi$ (is called 'quantum')	
		heat capacity	k_B	$1.380649 \times 10.^{-23.}$J/K (is called 'Boltzmann')	
Non-coherent	supplementary constants	the total solid angle of a hypersphere	Ω_k	$\dfrac{2\pi^{\frac{k+1}{2}}}{\Gamma(\frac{k+1}{2})}$ rad^k	k=0,1, 2 Ω_0=2 Ω_1=2π rad (cycle) Ω_2=4π sr (turn)
		logarithm of an integer	f_k	$\log(2^k)$	k=1(bit), d(figure), 4(nibble), 8(byte), .. d=log$_2$(12.)
		amount of substance	mol$_u$	132.007620 mol	(=12.$^{24.}$/ N_A)
		elementary charge	e	$1.6021766340 \times 10.^{-19.}$C	$(=\sqrt{\frac{\alpha h}{\Omega_n}})$

Table 2 Physical, material and astronomical constants[6]

ALL VALUES DOZENAL

Constant Symbols and Name (UNDERLINE INDICATES CONSTANT MAINTAINS SAME VALUE BETWEEN SYSTEMS u AND h)		Constant Value expressed by the Universal Unit Systems		Exponent N of$\times$ 10;^{N}	Unit Symbol (u and h suffixes omitted)
		with the Rydberg constant (u)	Harmonic System (h)		
R_∞	Rydberg constant	1	1;00170000	6;	Ω_1/m
c_0	the speed of light in vacuum	1		8;	m/s
$\hbar$	quantum of action	1		-26;	J s
k_B	Boltzmann constant	1		-20;	J/K
N_A	Avogadro constant	1		20;	mol^{-1}
R	gas constant	1		0;	J/(mol K)
u	unified atomic mass unit	1;0009060E	1;00240733	-20;	g [7]
a_B	Bohr Radius	1;005E85688	1;00447X742	-9;	m
α	fine structure constant	1;07399404XX		-2;	-
e	elementary charge	1;0374439E14		-14;	C
m_e	electron mass	0;E469221744	0;E48324X199	-23;	g
σ	Stefan-Boltzmann constant	1;E82E28		-1E;	W/(m^{2}K^4)

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[6] If CODATA (2018) values are required, see http://physics.nist.gov/cuu/Constants/index.html .

[7] Because g$_u$ is approximately 100;$^{10;}$ u, I add alias name 'looloh'(lúːloʊ/əʊ) to g$_h$.

m_G	gravitic meter $(\sqrt{2E};\ l_P)$	1;00186	1;00016	-27;	m
l_P	Planck length	2;0445E	2;04134	-28;	m
F_P	Planck force $(\hbar c_0/\ l_P^2)$	2;XE206	2;XEE32 (≑ 2;E)[8]	35;	N
G	Newtonian constant of gravitation (c_0^4/F_P)	4;15768	4;14663	-X;	$(m^4/s^4)/N$
θ_W	weak mixing angle	E;304		-2;	Ω_1
V_m	molar volume of an ideal gas under standard conditions	1;02X469	1;025665	2;	m^3/mol
	black-body radiation at the ice point	0;EX2466	0;EX8784	2;	W/m^2
	maximum density of water	1;088183	1;092X47 (≑ 15;/14;)	2;	g/m^3
	density of ice at the ice point	0;E7E9	0;E85E	2;	g/m^3
	specific heat of water[9]	0;6052	0;6045 (≑ 1/2)	0;	J/(g K)
	surface tension of water at 25°C	0;EE68	0;EEE4	-1;	N/m
atm	standard atmosphere	1;65008E	1;659967 (≑ 1;66)	4;	P
g_n	standard gravitational acceleration	5;5X54XE9	5;5E21264 (≑ E;/2)	0;	m/s^2
r_E	gravitational radius of Earth	2;41E8982X0X	2;418030652	-2;	m
au	astronomical unit	8;X67575535	8;X55509X31	X;	m
au	astronomical unit	9;E91731X53		-3;	$c_0\ s_E$ day

Table 3 Power prefixes

name	symbol	Plain text	value	name	symbol	Plain text	value
dirac [10]		D	10;				
hyper		**H**	**10;⁴**	**sub**		**s**	**10;⁻⁴**
cosmic	+	**_+**	**10;⁸(=U)**	**atomic**	-	**_-**	**U⁻¹**
di-cosmic	2+	_2+	U^2	di-atomic	2-	_2-	U^{-2}
ter-cosmic	3+	_3+	U^3	ter-atomic	3-	_3-	U^{-3}
tetra-cosmic	4+	_4+	U^4	tetra-atomic	4-	_4-	U^{-4}
penta-cosmic	5+	_5+	U^5	penta-atomic	5-	_5-	U^{-5}
hexa-cosmic	6+	_6+	U^6	hexa-atomic	6-	_6-	U^{-6}
hepta-cosmic	7+	_7+	U^7	hepta-atomic	7-	_7-	U^{-7}

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[8] If this is expressed as 2;E, the error from CODATA (2018) becomes -6;61(-6.51) times standard deviation.

[9] This corresponds to the definition of the thermodynamic calorie.

[10] 'dirac' is only used when expressing the unit of the Gravitic System with the Harmonic System. (i.e., gravitic meter = tetra-atomic dirac harmon, gravitic second = penta-atomic dirac nic, gravitic gram = atomic dirac looloh)

Table 4 Examples of natural scale quantity representation [11]

quantity	symbol	value	refer to
2E; penta-cosmic Newton	$2E;_{5+}N$	$2E;{\times}U^5$ [harmonic] Newton	the Planck force
6;di-cosmic nic	$6;_{2+}nc$	$6;{\times}U^2$ [harmo]nic[second]	the age of the universe
cosmic hyper bit [Boltzmann]	$_{+}Hf_1[k_B]$	$U^{1@4}\log2^1$ [Boltzmann]	1.01 Tera Byte(=$2^{43\cdot}$bit)
cosmic harmon	$_{+}hm$	U^1 harmon[ic meter]	the speed of light in vacuum
unino atomic harmon	$0;_1hm$	$U^{-1@1}$ harmon[ic meter]	the Bohr radius
di-atomic Coulomb	$_2C$	U^{-2} [universal] Coulomb	the elementary charge
di-atomic effective Watt [12]	$_2W_e$	U^{-2}[harmonic]effective Watt	a photon power (540.THz)
ter-atomic looloh	$_3\ell\ell$	U^{-3} looloh	the unified atomic mass unit
2; tetra-atomic harmon	$2;_4hm$	$2;{\times}U^{-4}$ harmon[ic meter]	the Planck length

Table 5 The Earth local extension for the Harmonic Universal Unit System

category		name / description	symbol	plain text	value
Non-coherent calendar time	units	clock	c (terno clock→tc)		2^{-7} day
		day	d (terno day→td)		$1\ \Omega_1$ 'day' corresponds to 86,400. s at the beginning of year 1900.
		year	y or a		365.days 31.clocks
		span (or octal century)	span or "`"		64. years
Non-coherent unit and constants		difference between thermodynamic temperature and 118,2354; K_h (≒ -74.36°C) approximate formula $℃ = \frac{1E;}{17;}°H\text{-}62;4$ $°H = \frac{17;}{1E;}℃ + 51;5$	°H	deg H	1,0000; K_h (≒1.210724 K ≒ 23./19. K) 100; 0000°H is 99.9839 °C 78;0000°H is 37.0262°C 61;0000°H is 14.0224°C 51;5026°H is 0.0000°C 99.9839 °C is the boiling point of water at the standard atmosphere.
	supple-mentary constants	the gravitational acceleration of the Earth (is called 'gee [of Earth] ')	g_E	g_E or gee	5;611X615 harmon/nic² g_E is defined as $c_0^2 r_E(m_E\ \text{rad})^{-2}$
		the rotation period of the Earth (is called '[Earth] solar') at the beginning of year 1900.	s_E	s_E or solar	0;EEEEEE15336X nic/terno clock (This should be 'coordinated'.)
		the meridian length of the Earth (is called '[Earth] meridian')	m_E	m_E or meridian	4124,216E; harmon/Ω_1

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[11] The part enclosed with'[]' can be omitted in Table 4 and Table 5.

[12] Units for quantity weighted by dimensionless human sensitivity are indicated by 'effective'.

W_e corresponds to 1;di-cosmic photon energy(540.THz) / nic and 115.667212 lumen.