

Universe number 1
System number 87

max. habitability **8**
 max. affinity **9**

Name of star **Omicron 2 Eridani**

system number **87**

companion stars **2**

class of star **K0 V**

mass **0.5** periapsis **8.4** a.u.

mass **0.84** M(sol)

class **M0 V** apapsis **20** a.u.

luminosity **0.456** L(sol)

mass **0.2** periapsis **210** a.u.

age **9.5** billion years

class **M5 V** apapsis **490** a.u.

diameter **0.008** a.u.

row number	ID #	orbit radius (a.u.) (10,000 km)	world type	size (Earth dia.)	mass (Earth masses)	g (Earth g.)	atmosphere	hydrographics	temp (C)	climate	solar day (hours)	HI	RVM	Affinity
1	I	0.10	tiny rock planet	0.55	0.13	0.44	none		441	infernal	infinite	0	-2	-2
2	II	0.25	small rock planet	0.77	0.32	0.54	none		169	infernal	infinite	0	0	0
3	III	0.42	small rock planet	0.61	0.18	0.48	none		66	very hot	infinite	0	-1	-1
4	IV	0.66	standard garden planet	0.91	0.82	0.99	standard breathable	75% water	19	normal	23.6	8	1	9
5			2 moonlets						1	chilly		0	0	0
6	V	1.1	small rock planet	0.43	0.06	0.34	none		-61	frozen	16.2	0	-1	-1
7			1 moonlet						-59	frozen		0	0	0
8	VI	1.6	standard ice planet	0.47	0.10	0.43	thin mildly toxic		-78	frozen	13.5	-1	0	-1
9	VII	4.6	medium gas giant	10.0	200	2.0	superdense corrosive				20.1			
10			12 moonlets						-170	frozen		0	0	0
11	VIIa	84	tiny ice moon	0.17	0.00	0.12	none		-181	frozen	151	0	0	0
12			4 moonlets						-170	frozen		0	0	0

display row #

4

(see system table)

system number	87	world	IV	<i>Bay Jing</i>	
Planetology		Population & economy		Society	
class of star	K0 V	Habitability	8		
mean distance	0.66 a.u.	Resources	abundant RVM 1		
perihelion	0.64 a.u.	Affinity	9		
aphelion	0.67 a.u.	settlement type			
axial tilt	16°	carrying capacity	8.2 E+9		
annual period	0.579 years	population			
	214.6 local days	tech level	10 PR		
local day	23.6 hours	per-capita income	G\$		
		typical wealth			
standard garden planet		economic volume	G\$		
diameter	0.91 x Earth's	spaceport class			
	11586 km	Government			
density	1.1 x Earth's	world unity			
	6.0 g/cm ³	government type			
surface gravity	0.99 g.	control rating			
	9.7 m/s ²	Installations			
escape velocity	11 km/s	type	PR		
vulcanism	moderate				
tectonics	moderate				
climate	normal				
temperature					
average	19 C				
perihelion	22 C				
aphelion	16 C				
illumination	96 % Earth's				
oceans	75%				
composition	water				
tidal range	1.2 m				
atmosphere					
main gases	N2, O2				
traces &c.					
class	breathable				
pressure	1.1 bar				
	(standard)				
Sky objects	apparent:	size	period	tides	
class		(degrees)	(hours)	(m)	
sun:	K0 V	0.68	23.6	1.2	

GURPS Space

advanced world-building sequence

user controls

Personal user number	1	enter a counting number (i.e. a positive integer)
use US Customary units?	FALSE	enter TRUE for US units, FALSE for Metric
campaign technology level	10	

Base carrying capacity at very high TL	
TL	Base carrying capacity
8	million
9	million
10	million
11	25 million
12	30 million

User-specified stellar characteristics

number of stars	3	Insert 1, 2, or 3, or leave blank for a random result
age of system	9.5	Insert the system age in billions of years, or leave blank for a random result
mass of primary star	0.84	Insert the mass of the primary star in solar masses, or leave blank for a random result
class of primary star	K0 V	The stellar class is calculated from mass and age. You cannot alter it.
luminosity of primary star	0.46	The star's luminosity is calculated from mass and age. You cannot alter it.
mass of [nearer] companion	0.5	Insert the mass of a companion star in solar masses, or leave blank for a random result
class of [nearer] companion	M0 V	The stellar class is calculated from mass and age. You cannot alter it.
luminosity of [nearer] companion	0.09	The star's luminosity is calculated from mass and age. You cannot alter it.
radius of 1st companion's orbit	0.014	Insert the semimajor axis of the nearer companion's orbit in AU, or leave blank for a random result
eccentricity of 1st companion's orbit		Insert the eccentricity of the nearer companion's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result
periapsis of 1st companion		Insert the periapsis of the 1st companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
apapsis of 1st companion		Insert the apapsis of the 1st companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
mass of further companion	0.2	Insert the mass of the primary star in solar masses, or leave blank for a random result
class of further companion	M5 V	The stellar class is calculated from mass and age. You cannot alter it.
luminosity of further companion	0.01	The star's luminosity is calculated from mass and age. You cannot alter it.
radius of 2nd companion's orbit	0.31	Insert the semimajor axis of the further companion's orbit in AU, or leave blank for a random result
eccentricity of 2nd companion's orbit		Insert the eccentricity of the further companion's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result
periapsis of 2nd companion		Insert the periapsis of the 2nd companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
apapsis of 2nd companion		Insert the apapsis of the 2nd companion's orbit in AU, or leave blank for a random result. This will over-ride radius and eccentricity
arrangement of gas giants		Insert "none", "conventional", "epistellar", or "eccentric", or leave blank for a random result
radius of orbit of first gas giant		Insert the semimajor axis of the first gas giant's orbit in AU, or leave blank for a random result. Will over-ride 'arrangement of gas giants'.
eccentricity of orbit of first gas giant		Insert the eccentricity of the first gas giant's orbit, on a scale of 0 to 1, not including 1, or leave blank for a random result. Will over-ride 'arrange

User-specified planet

world type	standard	Insert "asteroid belt", "tiny", "small", "standard", or "large", or leave blank for a random system.
subtype	garden	Insert "hadean", "ammonia", "ice", "ocean", "garden", "greenhouse" or "chthonian"
complete world type	standard garden	This value is calculated. You cannot alter it.
primordial atmospheric mass	1.1	Insert relative atmospheric mass (about 0.5 to 1.5). May be diminished by tide-locking.
basic atmosphere	breathable	This value is calculated. You cannot alter it.
worse atmosphere?	FALSE	Insert TRUE for marginal atmosphere, else FALSE or leave blank
atmospheric composition	breathable	This value is calculated. You cannot alter it.
marginal condition number		Insert the number of a marginal condition from the table on the right
marginal condition		This value is calculated. You cannot alter it.
primordial hydrographic coverage	75	Insert hydrographic % between 50 and 100
average surface temperature	292	Insert temperature between 250 and 340 Kelvins
that's	19	Celsius
climate	normal	This value is calculated. You cannot alter it.
blackbody temperature	282	This value is calculated. You cannot alter it.
density	1.09	Insert density between 0.8 and 1.2 times Earth's
diameter	0.91	This value is calculated. Adjust it using density and surface gravity.
surface gravity	0.99	Insert surface gravity between 0.49 and 1.04 times Earth's
mass	0.82	times Earth's. This value is calculated, you cannot alter it.
atmospheric pressure	1.09	times Earth's. This figure is calculated. To adjust it, alter atmospheric mass.
orbital radius	0.66	Astronomical units. This figure is calculated. You cannot alter it.
orbital eccentricity	0.02	
obliquity (axial tilt)	16	(degrees)
primordial day length	6.5	Insert the original day length (before tidal braking) in hours. About 6 to 40, average about 12.
number of major moons	0	0, 1, or 2. Or leave blank for a random result.
number of moonlets	2	0, 1, or 2. This value will be over-ridden if number of major moons is not blank or zero.
resource value modifier	1	Insert resource value between -2 and 2
vulcanism	moderate	Insert "none", "light", "moderate", "heavy", or "extreme", or leave blank for a random result.
tectonics	moderate	Insert "none", "light", "moderate", "heavy", or "extreme", or leave blank for a random result.

number	marginal condition
1	Cl, F
2	sulfur compounds
3	NOx
4	organic toxins
5	low O2
6	pollutants
7	high CO2
8	high O2
9	inert gases