

## KELT-7 b

Velocity Profile Currently Unavailable

### Orbital Parameters

Msin(i)	[mjupiter]	1.26 ± 0.179
Planet Mass	[mjupiter]	1.28 ± 0.18
Semi-Major Axis	[au]	0.04416 ± 0.00074
Separation	[au]	0.04416 ± 0.00074
Orbital Period	[day]	2.7347749 ± 3.9×10 <sup>-6</sup>
Velocity Semiamplitude	[m/s]	138 ± 19
Orbital Eccentricity		0
Orbit Inclination	[deg]	83.76 +0.38/-0.37
Argument of Periastron	[deg]	90
BigΩ	[deg]	Unavailable
Time of Periastron	[jd]	Unavailable
Velocity Slope	[m/s/day]	Unavailable
Spin-Orbit Misalignment	[deg]	9.7 ± 5.2
Transit		✓

### Transit Parameters

Planetary Radius	[rjupiter]	1.533 +0.046/-0.047
Epoch of Transit Center		2456223.9592 ± 0.0017
Duration of Transit	[day]	0.14630 +0.00097/-0.00092
Impact Parameter		0.597 +0.022/-0.025
a/R*		5.50 ± 0.167
Transit Depth		0.00828 ± 0.00012
Planetary Density	[g/cm <sup>3</sup> ]	0.422 +0.073/-0.068
Surface Gravity		3.129 ± 0.066
Distance During Transit		Unavailable
RR		0.09097 +0.00065/-0.00064

### Orbital Fit Properties

Reduced Chi Squared		Unavailable
# of Observations		64
RMS of Velocities		Unavailable
Frozen Eccentricity Flag		✓
Flag for linear Trend		X
Components		1

### Stellar Properties

Star Name		KELT-7
Binary Flag		X
Mass of Star	[msun]	1.535 +0.066/-0.054
Radius of Star	[rsun]	1.732 +0.043/-0.045
[Fe/H]		0.139 +0.075/-0.081
T <sub>eff</sub>	[K]	6789 +50/-49
Density of star	[g/cm <sup>3</sup> ]	0.419 +0.027/-0.025
log <sub>10</sub> (g)		4.149 ± 0.019
Vsin(i)	[km/s]	65.0 +6/-5.9
Gamma	[km/s]	Unavailable

### Stellar Magnitudes

V mag		8.5
B-V		0.43
2MASS J		7.7
2MASS H		7.6
2MASS K <sub>S</sub>		7.5
S <sub>HK</sub>		Unavailable
log R <sub>HK</sub>		Unavailable
KP		Unavailable

### Coordinates and Catalogs

RA (h:m:s)		05:13:10.922
DEC (d:m:s)		+33:19:05.83
Parallax	[marsec]	7.75 +0.51/-0.45
Distance to Star	[pc]	129.0 ± 8
Hipparcos Catalog #		24323
HD #		33643
Gliese Catalog #		Unavailable
HR #		Unavailable
SAO Catalog #		57753

### Discovery and References

Other Name	Unavailable
First Publication Date	2015
Method of discovery for the planet	Transit
Method of discovery of first planet in system	Transit
Orbit Reference	<a href="#">Bieryla 2015</a>
First Reference	<a href="#">Bieryla 2015</a>
EPE Link	<a href="#">KELT-7 b</a>
ETD Link	Unavailable
Exoplanet Archive Link	<a href="#">KELT-7 b</a>
SIMBAD Link	<a href="#">HD 33643</a>
Kepler ID	Unavailable
KDE	X
EOD	✓
Microlensing	X
Imaging	X
Timing	X
Astrometry	X