



Our solar system consists of our star, the Sun, and everything bound to it by gravity ??? the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune; dwarf planets such as Pluto; dozens of moons; and millions of asteroids, comets, and meteoroids.



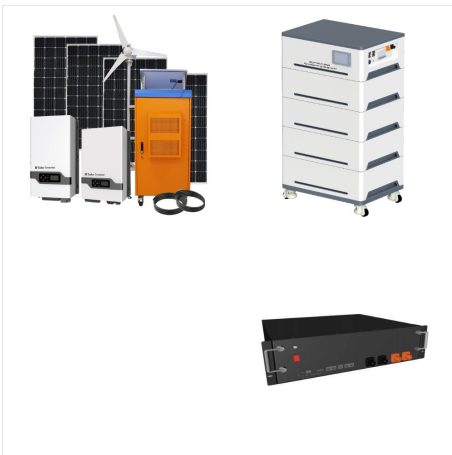
Despite its proximity to the Sun, Mercury is not the hottest planet in our solar system ??? that title belongs to nearby Venus, thanks to its dense atmosphere. But Mercury is the fastest planet, zipping around the Sun every 88 Earth days.



Size and Distance. Our nearness to Venus is a matter of perspective. The planet is nearly as big around as Earth ??? 7,521 miles (12,104 kilometers) across, versus 7,926 miles (12,756 kilometers) for Earth. From Earth, Venus is the brightest object in the night sky after our own Moon.



A planet is a celestial body that (a) is in orbit around the Sun, (b) has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape, and (c) has cleared the neighbourhood around its orbit.



By studying neighboring dust rings at Mercury, Venus and Earth, where dust traces out the enduring effects of gravity in the solar system, scientists can develop techniques for reading between the dust rings both near and far.



The Venus Climate Orbiter mission (PLANET-C), or "AKATSUKI", is studying the atmospheric circulation of Venus. Meteorological information will be obtained by globally mapping clouds and minor constituents successively with four cameras at ultraviolet and infrared wavelengths, detecting lightning with a high-speed imager, and observing the