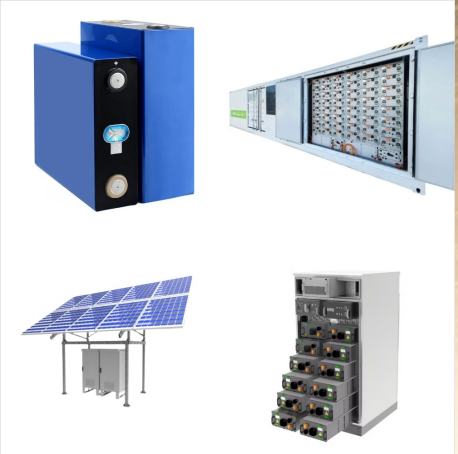
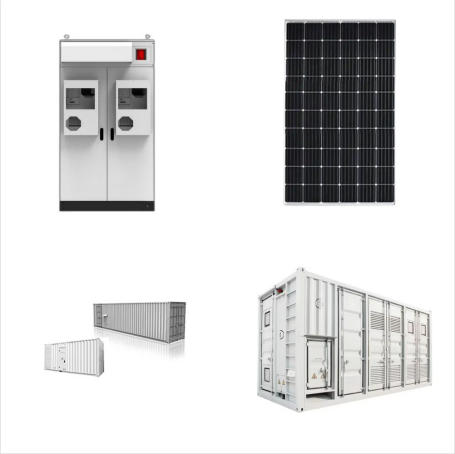
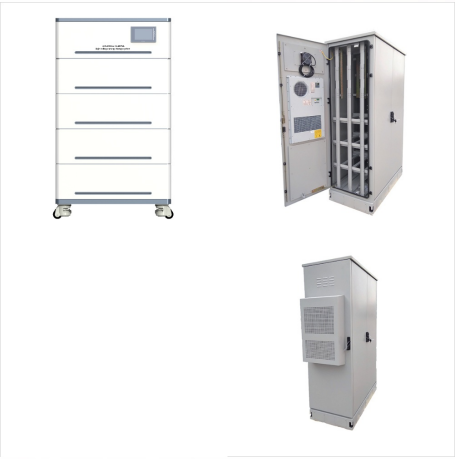


? Earth, third planet from the Sun and the fifth largest planet in the solar system in terms of size and mass. Its single most outstanding feature is that its near-surface environments are the only places in the universe known to harbor life. Learn more about development and composition of Earth in this article.

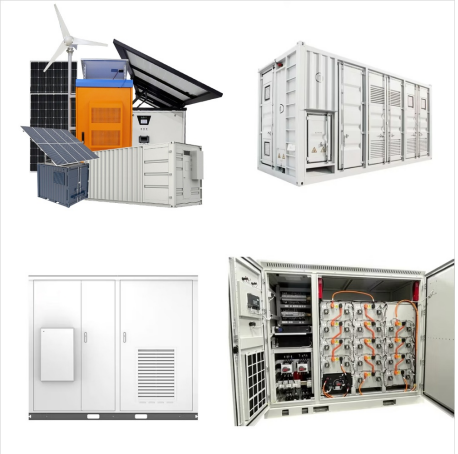


Earthdata is the home for full and open access to NASA's Earth science data collections, accelerating scientific advancement for societal benefit. NASA operates state-of-the-art platforms that collect critical information about our home planet. Drill down to the data and tools you need by exploring platforms on Earth and in the sky

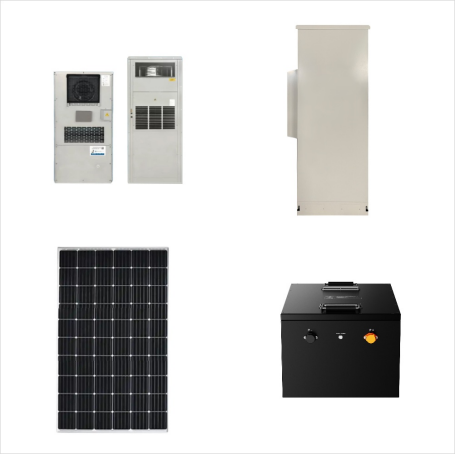


Stay up-to-date with the latest news and articles from NASAEarth as we discover more about our home planet. Stay up-to-date with the latest news and articles from NASAEarth as we discover more about our home planet. Operating at altitudes above 99% of the Earth's atmosphere, NASA's ER-2 aircraft is the agency's highest-flying airborne

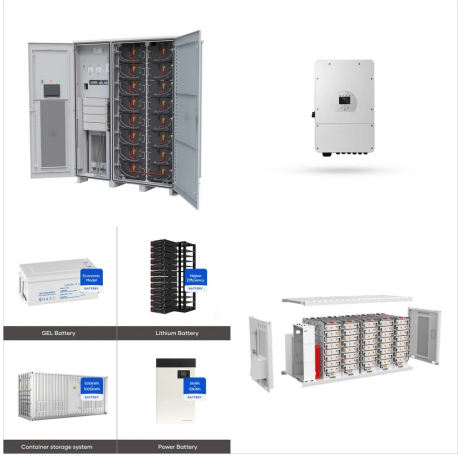
NASA PLANET EARTH



Everything that happens on the International Space Station revolves around one thing: Earth, sixteen times a day! So for Earth Day, NASA offers a gift you can''t get anywhere else with this leisurely view of our home planet, from 250 miles up, rendered in extraordinary ultra-high ???

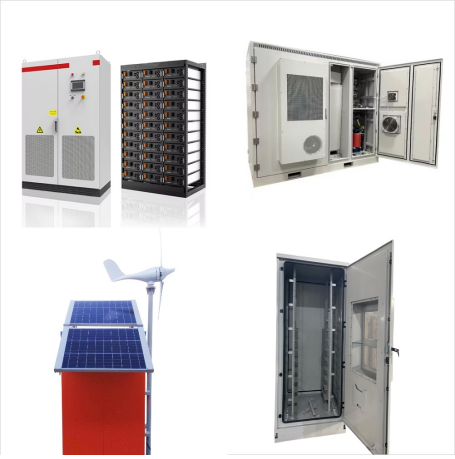


Explore our home planet with NASA Join NASA Earth scientists for a 360-degree view of our planet as they head into the field to study ice in Greenland and coral reefs in Hawaii. You can stand with scientists on Arctic ice, fly above the ice sheet, glaciers and sea ice as part of Operation IceBridge, [???]

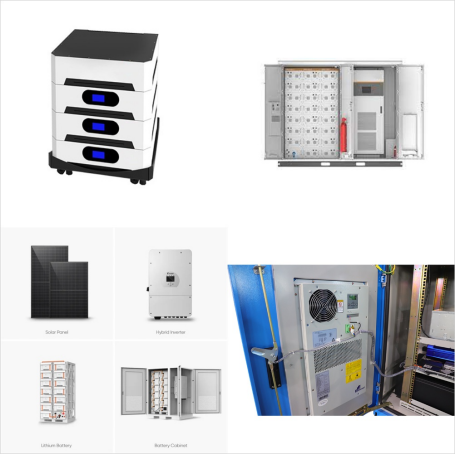


NASA's Transiting Exoplanet Survey Satellite (TESS) has discovered its first Earth-size planet in its star's habitable zone, the range of distances where conditions may be just right to allow the presence of liquid water on the surface. Scientists confirmed the find, called TOI 700 d, using NASA's Spitzer Space Telescope and have modeled the planet's potential ???

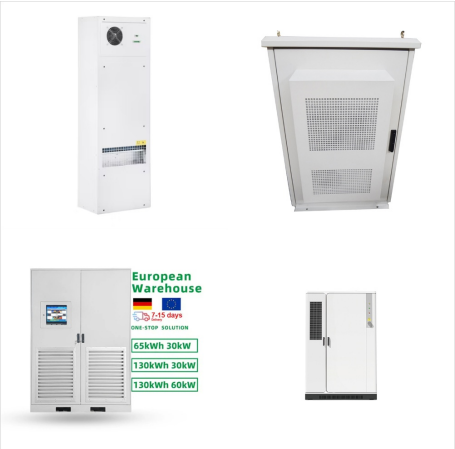
NASA PLANET EARTH



Overview Most of the exoplanets discovered so far are in a relatively small region of our galaxy, the Milky Way. ("Small" meaning within thousands of light-years of our solar system; one light-year equals 5.88 trillion miles, or 9.46 trillion kilometers.) Even the closest known exoplanet to Earth, Proxima Centauri b, is still about 4 light-years [???]

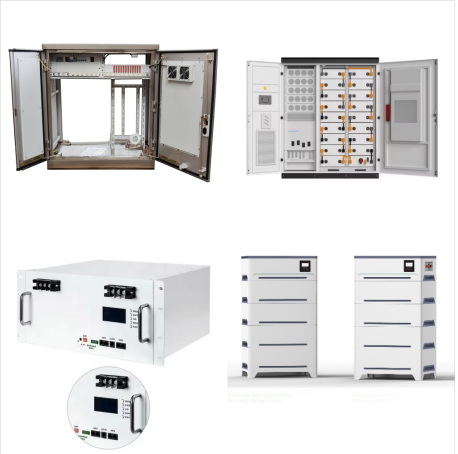


NASA's Juno spacecraft took three images of Jupiter's Great Red on Feb. 12, 2019, that were used to create this color-enhanced view. At the time the images were taken, the spacecraft was between 16,700 miles (26,900 ???

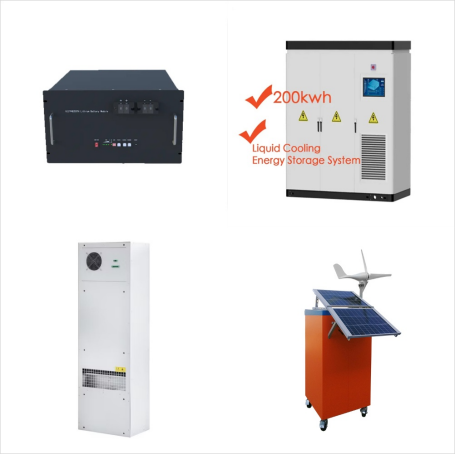


Right: The first image of Earth taken by a planetary spacecraft, Galileo, as it made a return encounter with its home planet for a gravity assist. As planetary spacecraft became more sophisticated in the 1970s, some turned their cameras toward the Earth as they departed on their long voyages of exploration.

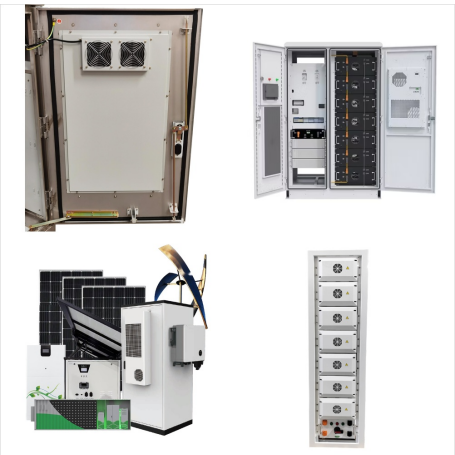
NASA PLANET EARTH



The NASA Worldview app provides a satellite's perspective of the planet as it looks today and as it has in the past through daily satellite images. Worldview is part of NASA's Earth Science Data and Information System. ESDIS makes the agency's large repository of data accessible and freely available to the public.



Planetary Fact Sheet in U.S. Units. Planetary Fact Sheet - Values compared to Earth. Index of Planetary Fact Sheets - More detailed fact sheets for each planet. Notes on the Fact Sheets - Explanations of the values and headings in the fact sheet. Schoolyard Solar System - Demonstration scale model of the solar system for the classroom



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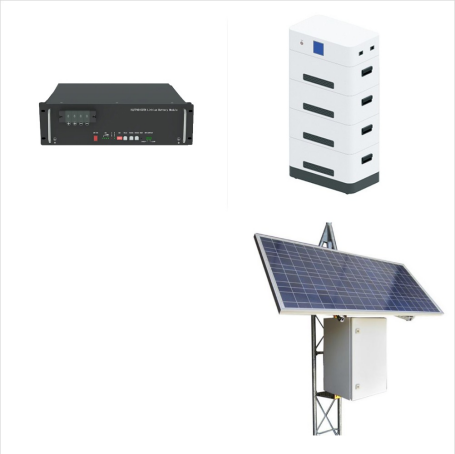
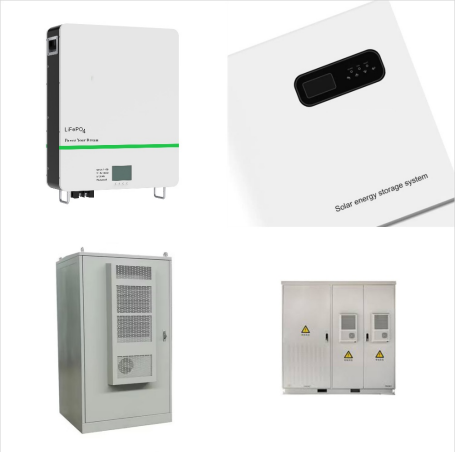
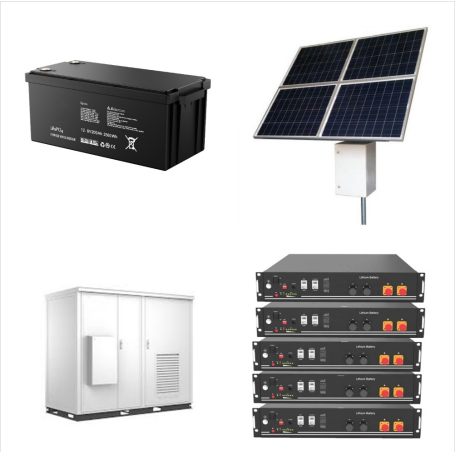
NASA PLANET EARTH



Earth hasn"t always looked like the blue orb we know so well. The variety of contending creatures that have come and gone over billions of years, in a sense, paints a picture of the many planets Earth has been: a lava-covered rock with a poisonous atmosphere, an ocean world with the bare beginnings of microbial life, a steaming tropical riot of earth-shaking ???

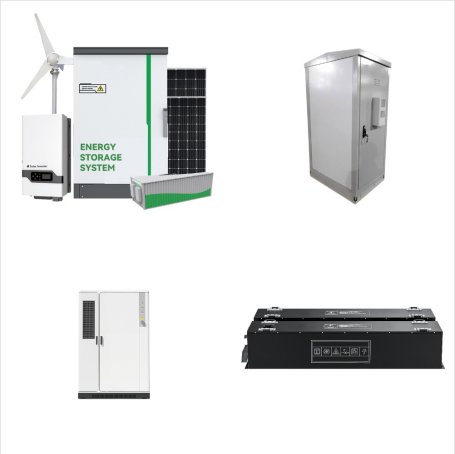


Using data from NASA's Transiting Exoplanet Survey Satellite, scientists have identified an Earth-size world, called TOI 700 e, orbiting within the habitable zone of its star ??? the range of distances where liquid water could ???

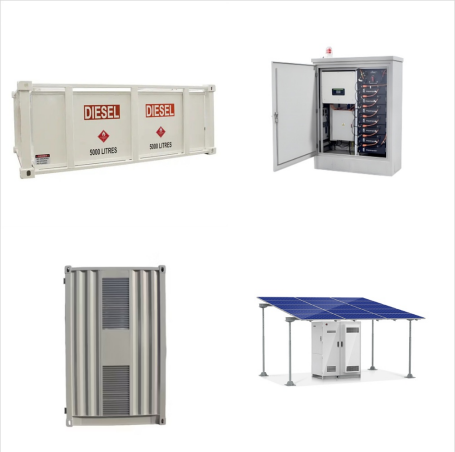


"On the 20th anniversary year of the discovery that proved other suns host planets, the Kepler exoplanet explorer has discovered a planet and star which most closely resemble the Earth and our Sun," said John Grunsfeld, associate administrator of NASA's Science Mission Directorate at the agency's headquarters in Washington.

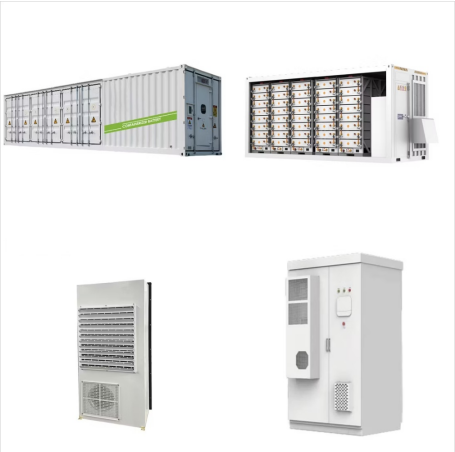
NASA PLANET EARTH



NASA's real-time science encyclopedia of deep space exploration. Our scientists and far-ranging robots explore the wild frontiers of our solar system. NASA. Solar System Exploration Our Galactic Neighborhood. Skip Navigation. menu close modal Planet Compare More Destinations Click for more Jupiter Click for more Earth Click for more

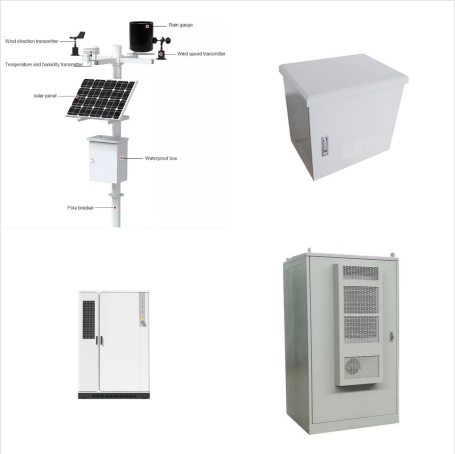


Earth is our home planet. Scientists think Earth formed billions of years ago. It is the third-closest planet to the sun. Only Mercury and Venus are closer. Earth's parts ??? land, air, water and life ??? are always changing. NASA studies Earth to learn how it changes. Some of the changes are natural. Some are caused by humans. Scientists

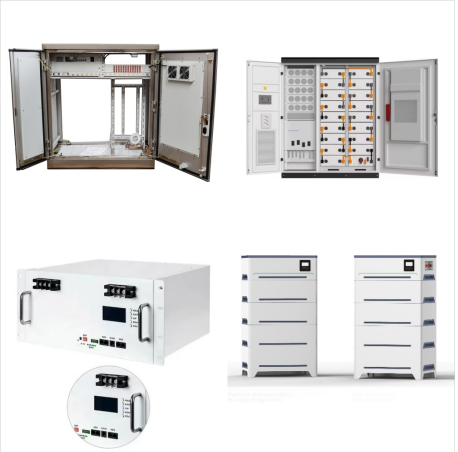


An international team of scientists has successfully measured a planet-wide electric field thought to be as fundamental to Earth as its gravity and magnetic fields. Known as the ambipolar electric field, scientists first hypothesized over 60 years ago that it drove atmospheric escape above Earth's North and South Poles. Measurements from a suborbital ???

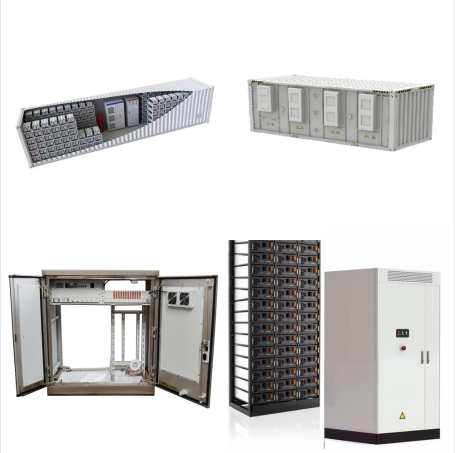
NASA PLANET EARTH



A NASA camera on the Deep Space Climate Observatory satellite has returned its first view of the entire sunlit side of Earth from one million miles away. This color image of Earth was taken by NASA's Earth Polychromatic Imaging Camera (EPIC), a four megapixel CCD camera and telescope.

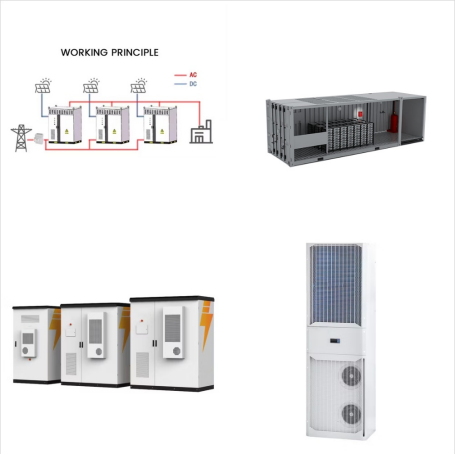


From a quarter to half of Earth's vegetated lands has shown significant greening over the last 35 years largely due to rising levels of atmospheric carbon dioxide, according to a new study published in the journal Nature Climate Change on April 25.. An international team of 32 authors from 24 institutions in eight countries led the effort, which involved using satellite ???

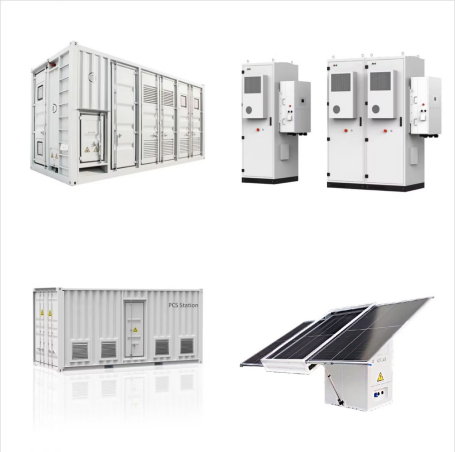


NASA launched a new website Monday so the world can see images of the full, sunlit side of the Earth every day. The images are taken by a NASA camera one million miles away on the Deep Space Climate Observatory (DSCOVR), a partnership between NASA, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Air Force.

NASA PLANET EARTH



"The discovery of Kepler-186f is a significant step toward finding worlds like our planet Earth," said Paul Hertz, NASA's Astrophysics Division director at the agency's headquarters in Washington. "Future NASA missions, like the Transiting Exoplanet Survey Satellite and the James Webb Space Telescope, will discover the nearest rocky



Earth Mean Orbital Elements (J2000) Semimajor axis (AU) 1.00000011 Orbital eccentricity 0.01671022 Orbital inclination (deg) 0.00005 Longitude of ascending node (deg) -11.26064 Longitude of perihelion (deg) 102.94719 Mean Longitude (deg) 100.46435 NASA Official: Dave Williams, david.r.williams@nasa.gov

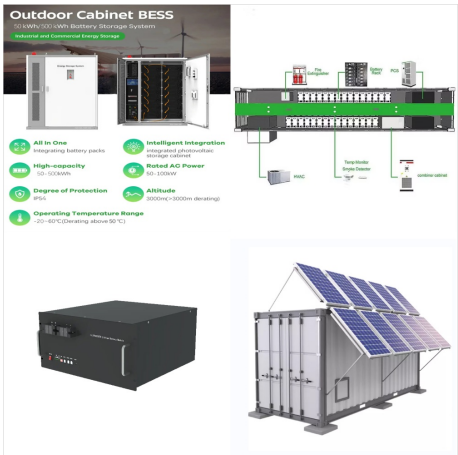
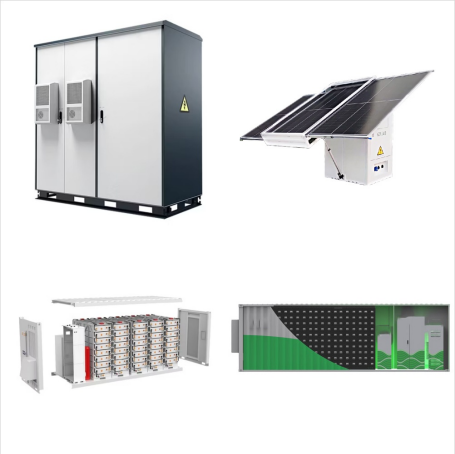
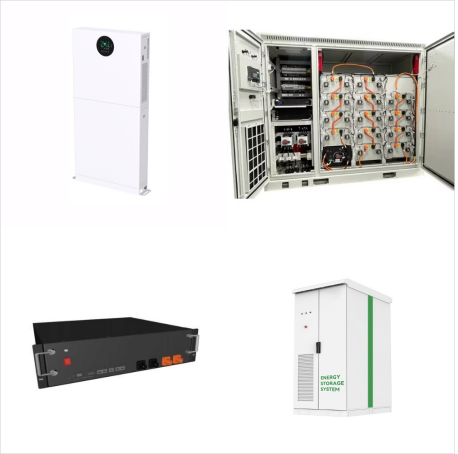


Figure by NASA's Scientific Visualization Studio. Visualization of January 2021 Global Atmospheric Carbon Dioxide (CO???) One government working for one planet. The Earth Information Center consolidates data and insights on how Earth is changing from across the US federal government. Earth.gov is also the gateway to other interagency

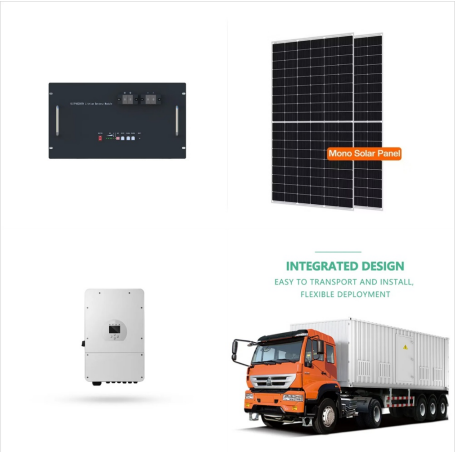
NASA PLANET EARTH



Using data from NASA's Transiting Exoplanet Survey Satellite, scientists have identified an Earth-size world, called TOI 700 e, orbiting within the habitable zone of its star ??? the range of distances where liquid water could occur on a planet's surface. The world is 95% Earth's size and likely rocky. Astronomers previously discovered three planets in this system, called ???



The solar system has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. There are five officially recognized dwarf planets in our solar system: Ceres, Pluto, Haumea, Makemake, and Eris. NASA's Europa Clipper is the first mission designed to conduct a detailed science investigation of Jupiter's moon Europa. The



b is a rocky, Earth-sized exoplanet that orbits a red dwarf star roughly 41 light-years away, in the constellation Octans. The planet is extremely close to its star, completing one orbit in two Earth-days. The planet's confirmation was made possible by Webb's data.