

Ecocapsule Micro Home

Title	Ecocapsule Micro Home
Description of the technology	<p>Ecocapsule is a self-sustainable intelligent micro-home, which utilises solar and wind energy. It allows people to live in remote places out of reach of infrastructure, while retaining a high level of living comfort. It can be used as a cottage, a pop-up hotel, caravan etc. Ecocapsule is powered by a dual system of energy production, which - in connection with high-capacity batteries - ensures energetic self-sufficiency even in the case of a temporary lack of sources. The spheroid shape of Ecocapsule is designed to maximize the collection of rain water and dew. The water filters consequently ensure the transformation of water from any natural source into drinking water. The design of the outer shell also minimizes energy loss. Hollow walls filled with highly efficient thermal insulation protect inhabitants from harsh environment and help achieve a performance almost on the level of a passive house. Furthermore, the unique and original design makes Ecocapsule a piece of art that stands out in every environment. Ecocapsule is optimized for easy transportation. It can fit into a standard shipping container and therefore can be easily shipped globally with the lowest shipping fees possible. The specially designed trailer enables transportation of the Ecocapsule with a passenger car, turning it into a fully functional caravan. Ecocapsule is a company that strongly believes in sustainable development. We offer a housing alternative that fully utilizes the latest technological innovative solutions, enables people to connect in harmony with nature and at the same time minimizes negative impact on the environment.</p>

<p>Further specifications</p>	<p>BASIC SPECIFICATIONS Exterior length: 4.67m/15.32ft Exterior width: 2.20m/7.22ft Exterior height: 2.50m/8.20ft Height with the wind turbine pole extended: 4.50m/14.76ft Dry Weight: 1350kg/2976lb Weight with full water tanks: 1650kg/3638lb Weight with trailer and full water tanks: 2000kg/4409lb Gross floor area: 8.2m² Gross internal area: 6.3m² Sleeping capacity: 1-2 persons Installed power output: wind 750W, solar 880W peak Battery capacity: 10 kWh (default option) MATERIALS USED The Ecocapsule® body is made from high-capacity insulated fiberglass shells overlaid on an aluminum framework. ENERGY PRODUCTION SYSTEM Low-noise wind turbine on telescopic pole, braced, height approximately 4.5m (14.7 ft) when extended, installed power output 750W. High efficiency solar panels on the roof, installed power output 880W peak. ELECTRICAL SYSTEM Basic system: 12V/24V, sockets 110/230V Electric installation: Electric cabinet, cable system, sockets, switches, sensors Batteries: min. 10kWh Lighting: 12V, LED lights Lightning protection Optional equipment: mini fridge, mini washing machine External connection to 110/230V network HEATING AND VENTILATION SYSTEM: Floor heating. Optional AC unit with low energy consumption will be available with the second generation Ecocapsule®. Direct ventilation via windows, indirect via passive heat recuperation unit. Water heater for kitchen and sanitary usage. CONTROL SYSTEM AND INTERNET: Smart home system and sensors Home system interface: smart-phone application Data network connection (within 2G/3G/4G coverage) WATER FILTRATION SYSTEM Water is collected, filtered and available at your convenience. The Ecocapsule® bathroom works like any other bathroom and is equipped with a water saving faucet and shower head. The water storage tank has a high capacity and you can add water from any source - either collected rainwater or water from any other external source (stream, lake, camp water, etc.). It is cleaned via a series of filters including a reverse osmosis filter. This system filters out 99,998% of dirt, so you are left with clean, usable water. Drinking water is also provided by filters installed on the faucets. TOILET The toilet is waterless, composting and separating. We are working on an incineration toilet for our second generation Ecocapsule® units. FURNITURE Our furniture is made from lightweight honeycomb panels with a wood veneer finish. The furniture includes a desk, cabinets, racks, folding bed with mattress (2m x 1.45m / 6.5ft x 4.7ft when unfolded), kitchenette cabinets and baggage cabinet.</p>
<p>Keywords</p>	<p>Ecological living, Energy saving, Protecting man and the environment</p>
<p>Form of cooperation</p>	<p>sale to end-user Product available since 1.5.2018</p>
<p>Language of communication</p>	<p>English, Slovak</p>
<p>Website</p>	<p>For more information, visit www.ecocapsule.sk</p>

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