The invention relates to the power engineering, namely to plants for sun energy conversion into the electric one. The self-orienting solar plant includes a sun-energy collector, joined therewith mechanisms for orientation in horizontal and vertical directions, as well as a system for orientation mechanisms control, providing the continuous collection of the sun energy during a whole sunny day, in an optimum regime, irrespective of the geographic latitude and season. Novelty consists in that the sun-energy collector is made in the form of a solar panel 5, and each of the orientation mechanisms contains a servomotor 6 and a precession double-reduction gear 9, including a crankshaft, onto which there are installed two double-ring satellite gears, installed onto its inclined sectors, the slope angles of which are opposed to each other and are equal to the precession angle, a central double-wheel gear, self-installing in axial direction, placed between the satellite gears, two lateral single-wheel gears, one of which is fixed and it is placed from the end of the servomotor, and the other is mobile and it is joined by means of a unilateral coupling with the driving shaft, the central double-wheel gear being joined with the driving shaft by means of another unilateral coupling opposite to the first one.

Claims: 1 Fig.: 8

