

images that will select the object, which appeared on the scene and is not associated with changes in the conditions of observation.

The method of morphology is a unified approach to the description, development and use of image analysis algorithms, based on the brightness and geometric characteristics of the image. It leads to the distinguishing basic distinction between simple correlation coefficient assessment and morphological one. The first compares images as brightness functions, but morphological correlation coefficient characterizes correlation between brightness of the first image and geometrical form of second image.

Therefore, advantage of morphological method is associated with the possibility of improving the integration of image registration conditions. Introduced by morphological analysis the notion of «form» significantly enriches the radiometric properties of reference image, making possible to build a more robust detection algorithms.

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AUTOMATED CONTROL SYSTEM OF ENERGY SUPPLYING IN INDUSTRIAL BUILDINGS ON THE BASE OF SOLAR PANEL

The alternative energy producing and supplying are deeply studied by scientists and researches of many countries. A solar panel offers one of a benefit solution to the energy savings. The solar panel can be defined as a set of solar photovoltaic modules electrically connected and mounted on a special supporting basement. Each photovoltaic module is a packaged, connected assembly of solar cells. The solar panel can be used as a component of larger photovoltaic systems. The goal of the latter is to provide various consumers as municipal, commercial and residential facilities with ecologically generated and economically delivered friendly electricity.

It is known these solar assemblies are rated with direct current output power according to standard conditions and ranged from 100 to 320 watts. Such solar cells can be packaged on one base and include solar cells assembling. The efficiency of a module determines the area of a module given the same rated output – an 8% efficient 230 watt module will have twice the area of a 16% efficient 230 watt module. A single solar module can produce only a limited amount of power; most installations contain multiple modules. The typical assembly of a photovoltaic

system consists of a panel or an array of solar modules, an inverter, a battery and wiring interconnection. Business and research organizations, large and small enterprises, educational establishments, hotel owners, farmers and home owners have applied large photovoltaic system with solar pack for their own aims related to autonomous electrical energy saving solutions.

Taking into account our research we could suggest that the installation with multiple modules will produce more amount of power than the one single solar assembly. The relationship between the positive and negative effects of the use of concentrators as a part of solar photoelectric platforms depends on the destination, conditions of system applications, their structure and parameters.

In the work we have researched the ways of energy supplying automation on the base of solar panels. It means not only the simplification of the whole process, but also increasing of efficiency and decisions for the solution of different disadvantages.

The features of solar panels structure cause degradation of performance with increasing of temperature. Partially obscured panel causes a fall of the output voltage due to losses in an unlit cell, which begins to act as a parasitic load. This disadvantage can be eliminated by installing a bypass for each photocell panel. Working characteristics of the photovoltaic panels shows that a maximum effectiveness depends on a proper selection of the required load resistance. In this case the photovoltaic panels are not connected directly to the load, but the management controller of PV systems is used to provide optimal operation of the panels.

So, these are only some ways of disadvantages solution. As to disadvantages of using they are expensive enough and have a low efficiency. In the work we tried to create more ways with these drawbacks. As to advantages it is not a secret that solar panels create ecologically clear energy, such energy can be widely used and available for anybody. The solar panels are silent and have sufficiently long lifetime.

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