

Computerized measuring device for microclimate parameters of industrial greenhouses using network technologies

Based on the information analysis of regulated requirements for modes of cultivation on protected grounds and existing solutions relating to building information-measuring systems of microclimate parameters of greenhouses, informative set of microclimate parameters of greenhouses was found and a block diagram of a computerized measuring meter was developed using modern component base and network technology. Basic functions that are binding in the development of the computerized measuring meter of microclimate parameters of industrial greenhouses have been listed and substantiated. Hardware and software provision of the model meter have been developed. The technique of integral assessment of the current state of greenhouse microclimate by on-line measurement of regulated physical parameters with further accumulation of database and building on their basis extrapolation models of informative indicators of dynamics of greenhouse microclimate. The priority areas for further research on measuring meters in order to improve efficiency of agricultural enterprises with protected grounds have been determined.

Keywords: *computerized measuring meter; network technologies; greenhouse; microclimate; remote measurement; block diagram; model sample*