

The proposed optoelectronic matrices with a tree-type structure can be used in optical communication systems. The 1-by-N linear switching matrix contains an optical input (1_0) and optical switches (4). The optical input (1_0) is connected to N outputs (1_1) of the matrix via a system (1) of branching fiber-optic lightguides forming a tree-type structure. The optical switches (4) are positioned at the nodes (3) of the tree-type structure. For the purpose of protection against crosstalks, each of the matrix outputs (1_1) contains an interlock switch (5), which provides for switching on and off the output depending on the state of the optical switch (4), which is connected to the output via a fiber-optic lightguide (11). The proposed linear switching matrix can be used for producing an N-by-N switching matrix that provides for effective protection against crosstalks.