

## ABSTRACT

This application relates to the field of optical communication technologies, and in particular, to an optical receiver, to provide a technical solution that is based on a cost-effective photodetector and that can ensure performance of the optical receiver. The optical receiver includes a photodiode,  
5 a trans-impedance amplifying unit, a control unit, and one or more automatic gain controllers. The control unit includes one or more control subunits. The control subunit includes one or more inductors, and a field-effect transistor coupled in parallel to the one or more inductors. An input end of each automatic gain controller is coupled to an output end of a corresponding control subunit, and an output end of the automatic gain controller is coupled to a gate of a field-effect  
10 transistor included in the corresponding control subunit. The automatic gain controller is configured to output a voltage signal to the gate of the field-effect transistor, where the output voltage signal is used to change a current conduction capability of the field-effect transistor.