

Abstract

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The present invention relates to an optical receiver (1) for receiving alternating-light data signals and for storing electrical energy obtained from extraneous light, having a photodiode (2) for receiving light, which comprises extraneous light and an alternating-light data signal component with a higher frequency in comparison to the extraneous light, and for converting the light into a photocurrent (I_P) which comprises a data signal current (I_N) and an extraneous light current (I_F) said receiver additionally comprises a coupling unit (3) for coupling in and separating the data signal current generated by the optical alternating-light data signal component from the extraneous light current generated by the extraneous light, an amplifying unit (4) for amplifying the data signal current and an energy storage unit (5) which is charged by the extraneous light current (I_F) and which includes a circuit for increasing voltage, wherein the energy charged in the energy storage unit (5) is used for at least partially supplying the energy for the optical receiver (1) and/or for at least partially supplying the energy for a measurement arrangement (16) comprising the optical receiver (1).

25 (Figure 2)