

ABSTRACT

Embodiments of this application provide a message transmission method, a main device, an OLT, and an optical communication system. In this application, a message format used for transmission between the main device and the OLT in an FTTR system is newly defined. In an uplink direction, the main device sends a second message to the OLT based on a first message sent by a sub device, where a first identifier of the sub device is newly added to the second message. In a downlink direction, the first identifier is also newly added to a third message sent by the OLT to the main device, so that the main device sends a fourth message to the corresponding sub device based on the third message. In other words, this solution implements management of the OLT on the sub device, and helps manage the FTTR system in a unified manner. In addition, an existing communication protocol may still be used between the main device and the sub device, and the management of the OLT on the sub device can be implemented without greatly adjusting the existing communication protocol. An application effect is good.