

**THE APPLICATION OF SPACEWIRE IN THE DATA MANAGEMENT SYSTEM
OF LSS IN WSO-UV MISSION**

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Short Paper

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ABSTRACT

WSO-UV is a space astronomy project, which is under the development with joint efforts from Russia, China, Germany, Italy, Spain, the United Kingdom and a number of other countries in the world. There are three scientific instruments onboard WSO-UV: the High Resolution Echelle Spectrograph (HiRDES) lead by Germany; the Long Slit Spectrograph (LSS) lead by China; and the Slitless Spectroscopy Instrument for Surveys (ISSIS) lead by Spain. The Long Slit Spectrograph instrument is able to observe faint extra-galactic sources at the far-UV end of the spectral range with high efficiency. WSO-UV selects SpaceWire to build data network onboard. The development team of LSS electronics comes from CSSAR, CAS, who are designing the data handling system based on SpaceWire at present.

This paper describes the solution to the SpaceWire interface of the data handling system of LSS. The design is not only conform to ECSS-E-50-12A, but also implementing the Reliable Data Deliver Transportation protocol. And the interface is dual redundancy.