

Optimization of concurrent data and high-precision time transfer modes in meteor burst synchronization equipment

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Abstract

We present the capacity of meteor synchronization equipment in data transfer mode with data rate depending on current synchronization state. The equipment works in two modes: time transfer and data transfer, both consume available meteor trails. For the particular application discussed, the amount of bits transferred on a single meteor trail is a logarithmic function of time-scale shift estimate error. The additional requirement of the application is both modes may not share the same meteor trail. © 2007 IEEE.

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