

## S6-2.4

### Voltage Management of a Remote Load

A. Penin<sup>1</sup>, Yu. Savva<sup>2</sup>, and A. Sidorenko<sup>1</sup>

<sup>1</sup>*D. Ghitu Institute of Electronic Engineering and Nanotechnologies, Chisinau, Moldova*

<sup>2</sup>*I.S.Turgenev Orel State University, Orel, Russian Federation*

Accurate regulation and measurement of a load parameters can be difficult when there are significant voltage drops between the power supply and the load. In particular, some methods of the load voltage management or regulation are known. These methods have these or those disadvantages. A new power supply method is offered for the remote load. This method is based on correction of the power supply output voltage by using an invariant relationship of the line. The affine ratio of three points, known in projective and affine geometry, is such invariant. Therefore, three samples of the output voltage and the corresponding samples of the input current are used. The affine ratio value does not depend from the line parameters and the measurement accuracy.