

Welcome to our Newsletter November 2018

Reduction Factor

A telecom copper cable placed in the vicinity of a power line will suffer electromagnetic perturbation. This will be especially important in the case of monophase lines (railways traction system) as compared to three phase lines (power lines). Signal perturbation, which causes reduction in the signal/noise ratio, could lead to accidents such as aspect change of railway signals. This is why it is essential to measure the screening effect of the cable armoring, represented by the <u>Reduction Factor</u> rk.



The test equipment for the reduction factor complies with the standards while allowing for a variable distance between the loop conductor and the cable under test.

Length Restrictions in Cable Testing

For RF measurements AESA has developed a method to extrapolate and normalise attenuation for long cables up to 305m. However, although this method allows for an efficient evaluation of cables in boxes, it does not replace frequent testing of 100m cable samples.

The <u>paper</u> presented at IWCS 2018 Conference in October in Providence (USA) describes the limitations in cable testing for both LF and RF parameters.

Upcoming Events



Meet us in Mumbai at Wire India, from 27 to 29 November 2018, on Booth #H94. We will show:

- The resistance bridge ResTest 50
- The <u>Vega DT</u>, the automatic LF/HF measuring system for LAN cables.

Helmut Gerber (Senior Area Sales Manager) and Vincent Arbet-Engels (CEO, Managing Director) are looking forward to meeting you there.

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