

## Aspects regarding TEMPEST protection measures of IT equipment using electromagnetic shielding enclosures

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**Abstract.** The need for shielding has become critical because of the tremendous growth of electronic devices in home, office and factory. Today, shielding against electromagnetic interferences (EMI) is being practiced by government, military, private industry, medical facility and R&D laboratories. Shielding serves two basic functions: that of preventing interference and preventing electronic eavesdropping. Electronic equipment can emit unintentional signals that allow eavesdroppers to reconstruct processed data at a distance. The document presents aspects of shielding of compromising electromagnetic emissions (TEMPEST) to ensure information security in information and communication systems - ICS. Thus, the authors analyze the minimum level of effectiveness of the electromagnetic shielding enclosures, in which IT equipment is installed. To describe this electromagnetic attenuation, a mathematical model was developed, numerical simulations were carried out, and tests were carried out with signals that simulated compromising emissions.

### References

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