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Title:	**General Data Format Security Extensions for Biomedical Signals**
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Abstract:	Biosignals recorded using personal health devices and stored in General Data Format (GDF) are vulnerable when the data is transferred, processed and stored to the external servers. The aforementioned vulnerabilities influence data security and user's privacy. In this paper, we propose modifications of GDF format that enables the encryption both - personal data and biosignals. These modifications do not corrupt the intrinsic structure of the GDF format and allow to encrypt independently the header with personal data and the section of biosignals. The proposed modifications were implemented, embedded and tested in a personal health device – multiparametric scale. The header data and biosignals are encrypted directly in the scale, and saved in the micro-SD card using our modified GDF format. Finally, we present the required resources needed for encryption process.

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