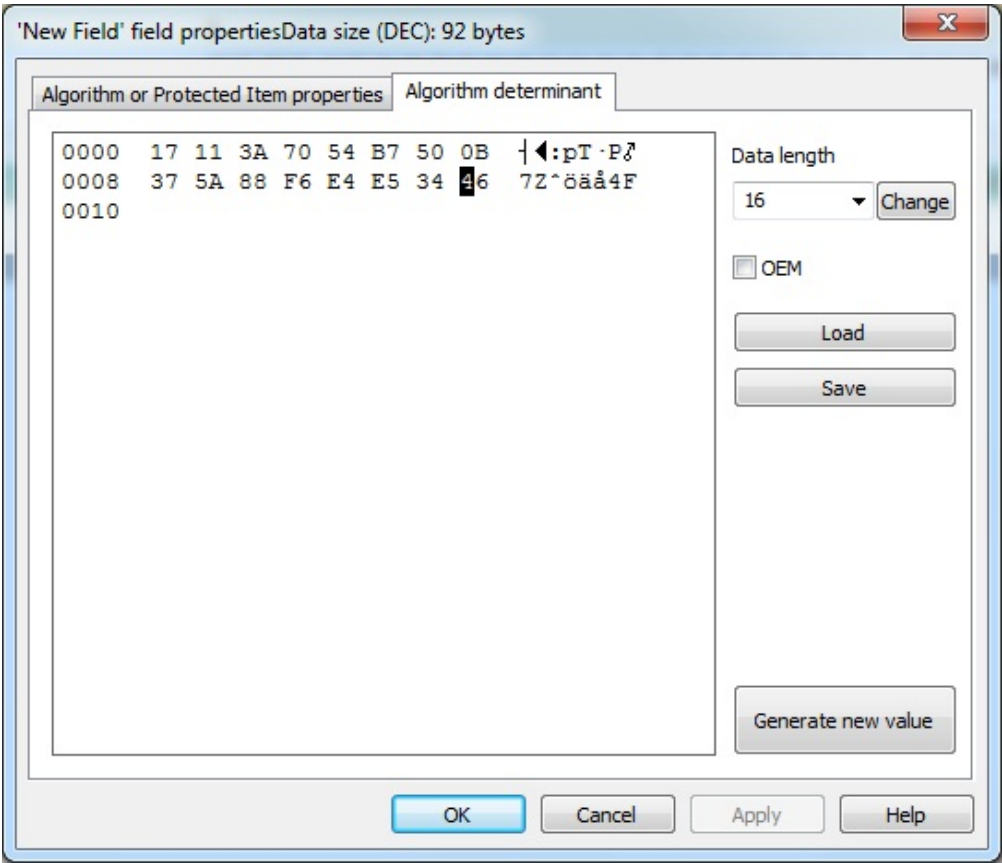# Editing Algorithm Determinant

Algorithm determinant dialog box is an editor for entering and changing the determinant in the hexadecimal format (Hexadecimal Editor):

Random numbers are written into the determinant by default upon creating the algorithm. They can be changed through forming the determinant yourself by entering new values directly into the editor window. You also can generate a new determinant automatically (button **[Generate new value]**).

GrdUtil.exe verifies the 'quality' of the determinant and returns the following warning if it does not meet its criteria:

Algorithm determinant dialog box control elements:

Interface element	Description of purpose
Hexadecimal editor window	Allows to enter determinant value of hardware algorithm
[Load] button	Loads dump from *.dmp file
[Save] button	Saves dump into *.dmp file
OEM flag	Selects Windows/DOS encoding. Windows (ANSI) encoding is used by default – OEM option is off.
[Generate new value] button	Automatically creates new algorithm determinant
Additional control elements for the algorithm previously created	
Data Size dropdown list	Change a determinant size
[Change] button	Display the new determinant size in a HEX editor

Changing the size of the determinant

For the algorithm being created previously, GrdUtil.exe permits the adjustment of the determinant size. In order to do this you need to select the required algorithm from the list of fields, execute **Edit | Field Properties** command and select **Algorithm Determinant** tab in the dialog box that appears.

The **Data Size** dropdown list on the left side of the dialog box serves to change the size of the determinant. After selecting the required size of the determinant, click the **[Change]** button next to the list and write the mask into the dongle.