

Solar Cell Powered OTP Token Card



DESCRIPTION

C-Sigma and Korotek have jointly developed a novel method to authenticate a user's identity, as to gain access to sensitive data and-or applications in a secure way, without the need to insert the device into readers. The method consists in encoding into a time sequence of white and black rectangles the code sent by the server (see examples of "flashing patterns" at www.c-sigma.it/demo.htm). By placing our patent pending token in front of the portion of the screen displaying said encoding sequence, the light collected by the solar cell is sufficient to generate the energy required for supplying the token's microprocessor and display. The very same solar cell also detects the variations in brightness, then decoded as to reconstruct the digital Challenge Code sent by the server. Said code is then processed by the microprocessor to generate a One Time Password, OTP, then displayed on the card's display. The aim is to increase security and user friendliness during internet shopping, financial and home banking transactions, or other forms of Dynamic Pass Code and e-commerce applications. With respect to other existing solutions, the use of the proposed token would be simpler for the user, in that it is the token itself that directly reads the challenge code, by decoding the variations in brightness of a portion of the login page. Just place it in front of the bright flashing rectangle shown on the login page, and then type on the PC keyboard the generated OTP.

"Green" and **eco-friendly**: not needing batteries, it takes its supply from the light emitted by said portion of the login page.

Psychologically comforting for the "fearful" user: "I am not inserting it into any card reader, so nobody could possibly "steal" my data".

Compatible with existing security infrastructures: it can be programmed for using encryption algorithms compatible with the servers, software, procedures, in which a typical customer would have already invested significant resources

For this product we are currently seeking partners and/or investors, with the aim to manufacture a prototype series, to then initiate a pilot project. Ideal partners shall possess the know-how required for the system integration of the server infrastructure side.

Licensing to interested companies is a further option that we are willing to explore.