ID-Karta IdxAPI

ID-Karta IdxApi communication protocol

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Supported device types and versions

This protocol supports data reading/writing from the identification cards ID-Karta, type ID898, and ID898K.

Communication line configuration

- Communication line category: **API**

Communication station configuration

- Communication protocol: **ID-Karta IdxAPI**
- Station address according to settings on a sensor (sensor displays the address in off-line status after switch on).

I/O tag configuration

I/O tags: **Ci, Co, TxtI, TxtO**

The address is a number in the range of 1 byte (0 to 255). The meaning of the addresses is stated in Table 1 below:

Table 1

Value type	Address	Meaning	Read /Write
Ci			
Ci	0	Pressing the key - I/O tag value is an index of the pressed key.	R
Ci	1	Identification - numerical. I/O tag value is the number of the last card which performed the identification.	R
Co			
Co	0	Beeping - a module of the sensor makes an audible alarm. I/O tag value defines the number of beeps (max. 255).	W
Co	1	Relay - control of relay on the module. The written value 1 up to 254 represents a time of closure x 0.5 second. 255 = permanent closure, 0 = immediate opening.	W
TxtI			
TxtI	0	Identification - text. I/O tag value is a string with the card number (in hex), which last made the identification (e.g. "40224AB8").	R
TxtO			
TxtO	0	Text on a display. It displays a text on a display. The format of string value must be "x;y;text", where *x* and *y* are the coordinates on the display (the size of display is 2 x 20 characters; the position 0;0 means upper left corner) and *text* is the text that will be displayed (max. 40 characters).	W

Configuration and files

The modules of the sensor communicate via RS485 interface and the communication is done by the **idx.exe** process, which must be running. D2000 KOM requires a dynamic library **idxapi.dll**, which is linked to **idx.exe**, for proper communication. The configuration of modules that communicate with **idx.exe** is stored in the registry:

```
[HKEY_LOCAL_MACHINE\Software\IDKarta\IDX]

[HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Uzly]

[HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Uzly\NaCom]
"Adresa"=dword:00000001
"Typ"=dword:00000001
"COM"=dword:00000001

[HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Zarizeni]

[HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Zarizeni\z1]
"Adresa"=dword:00000001
"Uzel"=dword:00000001
"Typ"=dword:00000001
```

The parameters in "HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Uzly" define both quantity and parameters of so-called nodes, i.e. communication interfaces. A key "COM" defines the serial port number. The list of devices is in "HKEY_LOCAL_MACHINE\Software\IDKarta\IDX\Zarizeni".

The producer **ID-Karta s.r.o.** (www.ID-Karta.cz) provides the files **idx.exe** and **idxapi.dll.**

Literature

- IDX, Basic communication module, Version 1.1, ID-Karta

Changes and modifications

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Document revisions

- Ver. 1.0 - October 26, 2001 - Creation of document

Related pages:

Communication protocols