Paufex DIRAS communication protocol

Supported device types and versions

This protocol supports data reading and writing to DIRAS devices produced by Paufex s.r.o. Prešov.

Communication line configuration

Communication line category: Serial.
The parameters of asynchronous line are set according to version and type of device connection.

Communication station configuration

Communication protocol: **Paufex DIRAS**.
The station address is a decimal number in the range 0 up to 127.
If necessary, the synchronization of real time of station can be enabled.

Station protocol parameters

You can set the following parameters:

Table 1

Key word	Full name	Meaning	Unit	Default value
RC	Retry Count	Number of response retries if some error in communication occurs.	-	3
MWR	Max Wait Retry	Maximum retries of reading the response until it is completed.	-	8
RT	Retry Timeout	Delay between the response retry if some error in communication occurs.	ms	1000 millisec.
WT	Wait Timeout	Delay between readings the response until it is completed.	ms	400 millisec.
WFT	Wait First Timeout	First waiting for response after sending the request.	ms	500 millisec.

String containing the protocol parameters is being defined as follows:

```
Key_word=value;Key_word=value; ...
```

Example:

```
RC=1;RT=500;
```

If there is used a keyword with an invalid value in the initialization string, there will be used corresponding default value according the table 1.

I/O tag configuration

I/O tags: **Ai, Ao, Ci, Co, Di, Do, TiA, ToA, TiR, ToR**.

The address requires three parameters: type, number and reference.

The values are set in hexadecimal format:

- Type – 0 up to FF
- Number (Nr) – 0 up to FFFF
- Reference (Ref) – 0 up to FF

Data reading and writing

Data reading is done in the individual references by the message 02. Message 03 is used to write a new value to the reference.

A real time may be read / written also with the I/O tag - TiA (or ToA) with address Type=FF,Nr=FFFF,Ref=FF. Message 0B ensures the real time reading real time and Message OC the real time writing.

Literature

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Changes and modifications

- 21.1.2000 – Testing the communication

Document revisions

- Ver. 1.1 – February 8, 2000 – Updating

ⓘ **Related pages:**

   Communication protocols