

ALYA SPOOL

SPOOL communication protocol

[Supported device types and versions](#)
[Communication line configuration](#)
[Communication station configuration](#)
[I/O tag configuration](#)
[Literature](#)
[Changes and modifications](#)
[Document revisions](#)

Supported device types and versions

This protocol allows reading of the weighted values of spools in the scales produced by ALYA Poprad. It can be used when several scales are connected to a line, since it contains the scale addressing.

For communication with one scale, you may use a simpler protocol [ALYA Gina](#).

ALYA Spool enables to send a request to several scales (they can be selected by the station parameter [Scales](#)). Each scale can send a response in the format **<STX><weight><tara><material><stand><winding><ETX><CRC>**, where:

- **<STX>** start byte (02H)
- **<weight>** 7 bytes for material weight, e.g. " 23.00"
- **<tara>** 6 bytes for tare, e.g. " 0.00"
- **<material>** 4 bytes for material code, e.g. "0000"
- **<stand>** 4 bytes for number of stand, e.g. " 331"
- **<winding>** 1 byte for coil winding. 1=full winding, 0=non-full winding
- **<ETX>** stop byte (03H)
- **<CRC>** check sum

Example of response:

```
<STX> 23.00 0.000000 3311<ETX>2
```

The address of the I/O tag is a number of a stand, on which the weight was measured (" 331" in example above)

Communication line configuration

- Communication line category: [Serial](#), [SerialOverUDP Device Redundant](#)

Communication station configuration

- Communication protocol: **ALYA Spool**
- The station address is not important.

[Configuration dialog window](#) - tab "**Protocol parameters**".

They influence some optional parameters of the protocol.

Table 1

Parameter	Meaning	Unit	Default value
Wait Timeout	Waiting between the readings of a response until it is completed.	ss.mss	00.050
Wait First Timeout	First waiting before reading the response after sending a request.	ss.mss	00.100
Max Wait Retry	The number of retries when reading the response until it is completed.	-	4
Retry Count	The number of retry requests in case of a communication error.	-	2
Scales	Comma-separated addresses of the scales which will be queried. The scale address is a capital letter. In periodic data reading, the D2000 KOM process tries to communicate with all configured scales and reads the values from them. Example: A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P	-	

I/O tag configuration

I/O tags: AI

I/O tag address - are numbers of stands.

I/O tag value is a weight of spools measured on the specified stand.

Literature

-

Changes and modifications

- July 8, 2015 - the parameters of the station were extended

Document revisions

- Ver. 1.1 – February 8th, 2000 – updating of the document
- Ver. 1.2 - July 8th, 2015 - revision and updating



Related pages:

[Communication protocols](#)