L&G Toccata via UNIP2

L&G Toccata via UNIP2 protocol

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Supported device types and versions

This protocol supports the communication with KPX-02 devices and radio modems RMMBX that are used for the autonomous data acquisition by TOCCATA protocol.

UNIP2 protocol is used as a transport configuration and data protocol.

Communication line configuration

- Communication line configuration: Serial, SerialOverUDP Device Redundant.
- Serial line parameters: 2400 - 38400 Baud (depends on settings of KPX-02 or radio modem), 8 data bits, no parity, 1 stop bit.

Communication station configuration

- Communication protocol: **L&G TOCCATA via UNIP2**
- Station address is configured in KPX-02.

Station protocol parameters

Communication station - configuration dialog box - "**Protocol parameters**" tab.
These parameters influence some optional parameters of protocol. You can set the following station parameters:

Table 1

Parameters used for UNIP2 communication with KPX-02 (locally).				
Key word	**Full name**	**Meaning**	**Unit**	**Default value**
ROUTE	Routing Address	The original address of the station for which the data was received by routing.	-	0
RC	Retry Count	Number of repeat calls if the communication error occurs.	-	2
RT	Retry Timeout	Delay between repeating the call if the communication error occurs.	ms	100
WFT	Wait First Timeout	First waiting for the response after sending the call.	ms	100
WT	Wait Timeout	Delay between reading the response until it is completed.	ms	100
MTU	MTU For Sending	MTU (maximum transmission unit) for sending data.	bytes	240
MRTU	MTU For Receiving	MTU (maximum transmission unit) for receiving data.	bytes	240
MWR	Max. Wait Retry	Number of retry response reading until it is completed.	-	20
WRD	Wait Response Delay	The period, after writing, during which D2000 KOM keeps communicating with the station to obtain the confirmation of successful write.	sec	0
Parameters that configures data acquisition by TOCCATA protocol in KPX-02 device (transported).				
Key word	**Full name**	**Meaning**	**Unit**	**Default value**
MPI	Max PA Items	Maximum PA data in one data block.	2 to 12	10
KLRD	KL Read Delay	Delay between the reading of KL points.	min	2
MAXERR	Max Errors	Maximum errors in communication with L&G device. When this value is exceeded, all data will become invalid.	-	4

RETRY	Retry	Number of retries of one call for data from L&G device.	-	2
TIMEOUT	Timeout	Absolute time necessary to read the response form L&G device.	ms	3000
TXDELAY	Tx Delay	Delay of sending the response from the communication device after receiving the call. Useful only for RMMBX radio modems.	x10 ms	15 (150 ms)
PRUV	PRU Version	Version of TOCCATA protocol. It is the same as in L&G TOCCATA protocol.	0, 1, 2, 33	0

String containing the protocol parameters is defined as follows:

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

Example:

```
WT=100;MWR=20;
```

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

The rules are the same as in TOCCATA protocol (see L&G TOCCATA protocol).

Literature

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Changes and modifications

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Document revisions

- Ver. 1.0 - October 29, 2002 - Creation of document
- Ver. 1.1 - November 19, 2002 - Parameters WRD and TXDELAY

Related pages:

Communication protocols