MESIT Devices

MESIT Devices communication protocol

Description

MESIT Devices protocol is a binary protocol intended for communication with capacitive level sensor produced by MESIT. The current implementation supports reading its data space.

Communication line configuration

Communication line category: Serial, SerialOverUDP Device Redundant

Parameters of asynchronous line according to design and type of connection of device:

- standard settings from the manufacturer: 38400 Baud, 8 data bits, no parity, 1 stop bit

Communication station configuration

Communication protocol: **MESIT Devices**
Station address is a decimal number that is intended for addressing on data bus with more SLAVE devices.

Station protocol parameters

Parameters may be entered in the dialog window of station configuration - **Parameters** tab. These parameters may be defined:

Table 1

Full name	Description	Unit	Default value
Full Debug	Received and sent data are recorded to the log of communication.	-	YES
Master Address	Decimal number that identifies a sender.	-	1
Wait First Timeout	First waiting on response after sending a request.	Ms	100
Wait Timeout	Waiting between reading the response.	Ms	100
Retry Timeout	Waiting before repeated call.	Ms	100
Max. Wait Retry	Maximum retries of reading response.	-	6
Retry Count	Maximum retries of request.	-	2

I/O tag configuration

Allowed types of I/O tags: **Ai, Ci, Di, TxtI, TxtO**

I/O tag address consists of four parameters separated by full stop. The format is: "M.R.O.L". Where "M" defines number of message, "R" defines type of request, parameters "O" and "L" specify offset and byte count that must be read from the received response. All these parameters are entered as decimal numbers. For numerical types of I/O tags, the values of parameter "L" can be only 1, 2 and 4. For text types of I/O tags, this parameter is limited by maximum length of data block of response.

As example, we may mention the reading of fuel temperature. It is read with the help of message number 0x0C and request type 0x50. In the response, this information is in two bytes that start with offset0x09. It means, the address of I/O tag is "12.80.9.2".

In addition to reading data, the protocol supports also the writing values into device memory. It is performed with the help of textual output I/O tags. In this case, the I/O tag address consists only of two parts, number of message and type of request. If you want to write the calibration curve into the device, you must create I/O tag with address "4.83". Then, the bytes must be entered in decimal format separated by hash symbol "#" into I/O tag, for example "0#1#123#233#".

Literature

Changes and modifications

- May, 2015: completion of I/O tag configuration

Revision of document

- Ver. 1.0 – December 3, 2014: implementation of protocol
- Ver. 1.1 - May 26, 2015: completion of I/O tag configuration

ⓘ **Related pages:**

Communication protocols