Remia E3

Remia E3 communication protocol

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Supported device types and versions

This protocol supports data reading/writing from a controller of quarter-hour maximum Remia EEE.

Communication line configuration

- Communication line category: Serial, SerialOverUDP Device Redundant, TCP/IP-UDP.
- Parameters of the serial line:
 - Baud rate 1200 Baud
 - No parity, 8 data bits, 1 stop bit
- Parameters of UDP line:
 - ° Host: IP address of the controller
 - ° Port: UDP port of the controller where requests are sent.
 - Note: The parameters of the backup server (Host and Port) are not used in this protocol.

Communication station configuration

- Communication protocol: Remia E3.
- The station address is set according to the address on a device (0 to 15) specified as a decimal number or as a hexadecimal number with a hash at the beginning (e.g. #6A).

Station protocol parameters

The configuration dialog box of station - the tab "Protocol parameters".

Table 1

Keyword	Full name	Meaning	Unit	Default value
RC	Retry Count	Maximum count of request retries. If no response returns after a request had been sent, the station's status will change to a communication error.	-	2
RT	Retry Timeout	Timeout before resending a request if no response has been received.	ms	100 ms
WFT	Wait First Timeout	The delay after sending the request and before reading the response.	ms	100 ms
WT	Wait Timeout	The delay between the response readings.	ms	300 ms
MWR	Max Wait Retry	The maximum number of retries of the response reading.	-	10

I/O tag configuration

I/O tag types: Ai, Ci, Co, Di, TiA, TiR.

The address is a number in the range from 0 to 300 (as a decimal number or as a hexadecimal number with a hash at the beginning, e.g. #0A). The meaning of the addresses is stated in Table 2:

Table 2

Value type	Address	Description	Read/Write
Ai			
Ai	0	Instantaneous power.	R

Ai	1	Average power.	R
Ai	2	Peak VT.	R
Ai	3	Peak NT.	R
Ai	4	Measurement 1 (main) - the last 1/4 hour (see Note).	R
Ai	5	Measurement 2 (secondary) - the last 1/4 hour (see Note).	R
Ci			
Ci	0	The number of electrometers.	R
Ci	1	The number of regulatory degrees.	R
Ci	2	The number of appliances.	R
Ci	3	Regulatory degree.	R
Ci	4	Tariff (0=VT, 1=NT).	R
Ci	5	Current regulatory degree.	R
Ci	6	Current average power (%).	R
Co	'		
Со	0	Regulated power VT.	R/W
Co	1	Regulated power NT.	R/W
Di			
Di	0 až 7	Type of electro meter (FALSE=active power [kW], TRUE=reactive power [kVAr]).	R
Di	100 až 164	Appliances (FALSE=idle state, TRUE=control state).	R
Di	200 až 264	Status signal (FALSE=inactive, TRUE=active).	R
TiR			
TiR	0	The time within a 15-minute interval.	R
TiA		'	
TiA	0	Date and time of initialization.	R
TiA	1	Date and time of power failure.	R
TiA	2	Date and time of the configuration change.	R
TiA	3	Date and time of the last reset.	R
TiA	4	Current date and time.	R
TiA	5	Time to reach peak VT.	R
TiA	6	Time to reach peak NT.	R
TiA	7	Time of the last quarter-hour.	R

Note: You can obtain also the values from an archive of the device for the current and previous month for both the main and secondary measurement. The reading of archive values may be started in the station dialog box or by the GETOLDVAL Tell command.

Literature

Changes and modifications

Document revisions

- Ver. 1.0 August 22, 2001 Creation of document
 Ver. 1.1 April 22, 2008 Updating

Related pages:

Communication protocols