

TCP/IP Modbus protocol access for RPP-E probe

1 Description

IP probe also suitable for easy software integration to various and large network systems of third parties (smart house, industrial systems, etc.) due to standard communication protocol TCP/IP Modbus protocol which allow read current measuring data from probe. For connecting is use IP address and standard port 502. Easy acces only via 8 read registers with command 03 ("Read Holding Registers"). Value of registers are updated every 10 seconds default..

Setting of probe basic parameters is made by standard web access over internet browser and IP address. See RPP-E - Operation Manual & Technical Specifications.

2 Address and values

TCP/IP MODBUS			
Current values	address of register	data type	units
ConcentrationAVR L (lower 2 bytes)	1	16-bit signed integer	[Bq/m ³]
Temperature	2	16-bit signed integer	[°C]
Relative humidity	3	16-bit signed integer	[%]
ConcentrationAVR H (higher 2 bytes)	4	16-bit signed integer	[Bq/m ³]
ConcentrationAVR L (lower 2 bytes)	5	16-bit signed integer	[Bq/m ³]
ConcentrationREC H (higher 2 bytes)	6	16-bit signed integer	[Bq/m ³]
ConcentrationREC L (lower 2 bytes)	7	16-bit signed integer	[Bq/m ³]
„HeartBeat“ – 16bit 1 second cyclic counter	8	16-bit integer	[s]

ConcentrationAVR – Returns current value of radon concentration (1-hour moving average) in Bq/m³ measured by IP radon probe. This value is updated every 4 minutes in IP radon probe.

ConcentrationREC – Returns last recorded value of radon concentration in internal memory in Bq/m³. This value is updated according to adjusted time „Concentration Record“ in list „Settings“ on probe web.