

TERA Radon Program

IP Radon Probe TSRE 1
TCP/IP Modbus protocol access



v.1 – 2017

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TESLA
 Podebradska 56/186
 180 66 Prague 9
www.tesla.cz

1 Introduction

This document describes technical specifications of TCP/IP Modbus protocol access.

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2 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 5 read registers with command 03 ("Read Holding Registers").

Setting of probe basic parameters is made by standard web access over internet browser and IP address. See TSRE1 - Technical Specifications & Operation Manual.

3 Address and values

TCP/IP MODBUS			
Current values	address of register	data type	units
Concentration L (lower 2 bytes)	1	16-bit signed integer	[Bq/m ²]
Temperature	2	16-bit signed integer	[°C]
Relative humidity	3	16-bit signed integer	[%]
Concentration H (higher 2 bytes)	4	16-bit signed integer	[Bq/m ²]
Concentration L (lower 2 bytes)	5	16-bit signed integer	[Bq/m ²]

Concentration – 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.

4 Revision History

Revision	Date	Comments
Rev.1:	31.3.2017	Initial release