Supercom 541

Radio Pulse Adapter

Application

The radio pulse adapter **Supercom 541** is suitable for the use with all kinds of supply types of measuring instruments and can, due to the integrated bidirectional radio communication module, be read by means of mobile (Radio modem Supercom 636) or fix data acquisition (Radio central Supercom 646/ Repeater 656). The battery operated radio pulse adapter **Supercom 541** is available with two pulse inputs.

Function

The battery-operated radio pulse adapter **Supercom 541** scans the pulses of one or two measuring instruments, accumulates them and stores the consumption data.
Two types of housing are available: IP54 for the internal use and IP68 for the external use. The radio pulse adapter is freely programmable or is programmed with the detection of the reverse flow or/and the manipulation detection.

Stored Data

The consumption data can be read out with a mobile radio modem or with a permanently installed radio central.
The following data are stored:
- Serial number (radio module)
- Identification number (serial number of the instrument)
- Medium: cold or warm water, gas, electricity, etc.
- Current time and date, Operating hours of battery
- Accumulated volume, actual value and 15 monthly values
- Fraud detection counter or cable
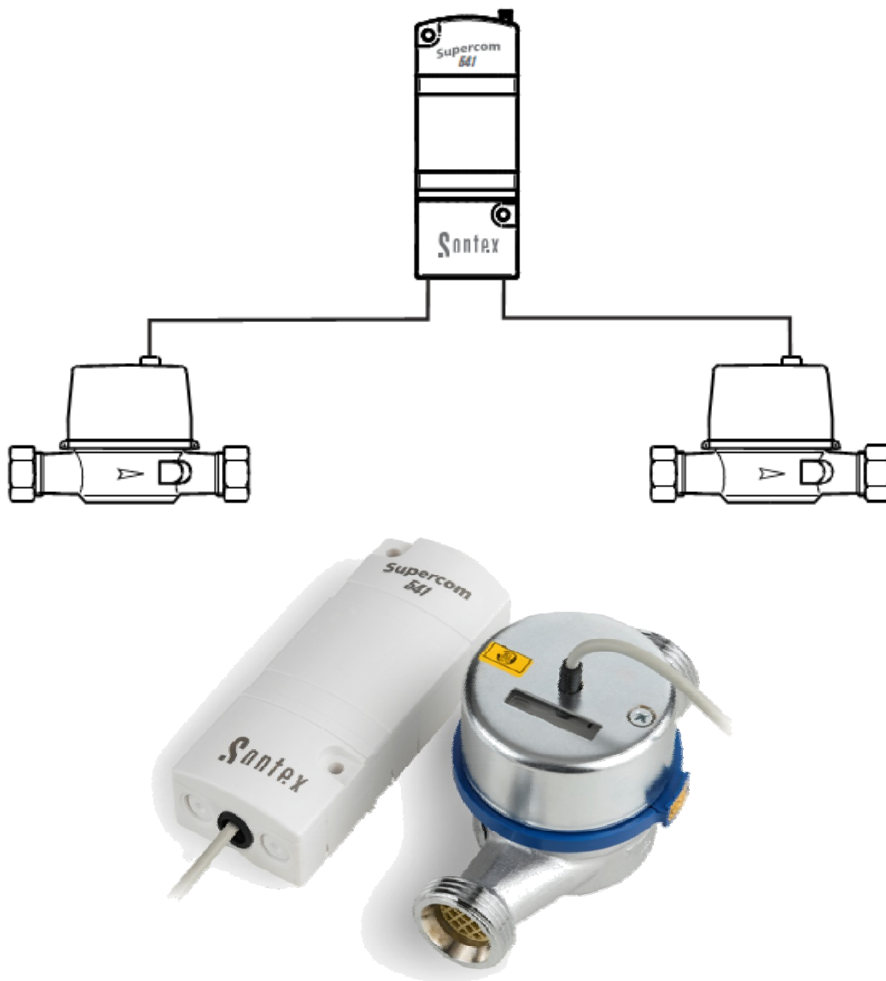- Reverse flow detection

Versions

Type of radio pulse adapter Supercom 541	Battery			
	IP54	IP68		
	1 or 2 counter	1 counter	2 counters	2 counters
Part No: 0541R	x000	x101	x202	x303
counter 1 (c1)	*	▪	▪	▪
counter 2 (c2)	*		▪	▪
fraud detection	*	▪	c1	c1 und c2
reverse flow detection	*	▪	c1	

* **=** freely programmable with the software Sontex916 / Tools916.

The IP68 versions of the radio pulse adapter Supercom 541 are hard-wired ex factory. Pay attention that during the final configuration with the PDA Software Sontex916 the preconfigured functions are not modified.

Example of use

Sontex radio pulse adapter Supercom 541 with two pulse inputs connected to two water meter. The read out will be done due to the bidirectional internal radio module.

Technical Data

General

Operating temperature	5° to 55°C
Storage temperature	-20 to 70°C
Length of the cable	
- IP54 (Version without cable)	max. 3.00 m acc. to the homologation
- IP68 (Version hard-wired)	max. 1.50 m
EMC-Approval	according to IEC / EN 61000

Housing

Housing dimensions	50x128x34 mm
Protection class	IP54 or IP68

Radio communication

Method	FSK, bidirectional
Frequency	433.82 MHz
Protocol	Radian, EN60870 (M-Bus)
Baud rate	2'400 Baud
Transmitting power	< 10 mW
Range	approx. 30 m*

* This value depends on the structure of the building.
 Due to the physical conditions, the sending and receipt ranges can vary in buildings or be completely impossible.

Data Memory

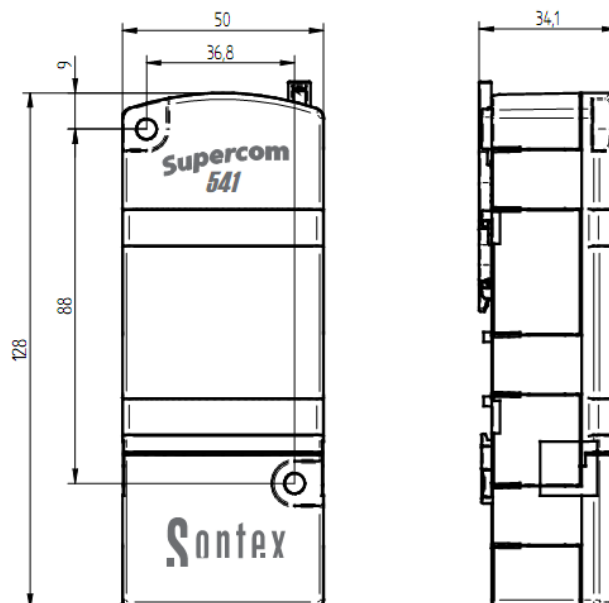|	
EEPROM	24 hours storing

Electrical data

Power supply	3V Lithium-long life battery
Life time	12 + 1 years, based on 52 read outs / year

Specification of the pulse inputs

Maximum frequency	
- Channel 1	20 Hz
- Channel 2	20 Hz
Minimum pulse length	2ms (galvanically not separated)

Dimension

Installation

Please note:
After installation, the radio module has to be protected with user seals to avoid unauthorized access.
Sontex expressly points out that the data transmission via mobile radio depends on the radio-technical propagation conditions at the place of installation and that under certain atmospheric or geographic conditions (especially within closed locations or in so-called radio shadows), radio communication cannot be established at any time and at any place. It is exclusively up to the user to check the radio-technical propagation conditions at the intended place of installation.

Use and maintenance

Attention
The lithium battery is not rechargeable. The battery must be disposed environmentally correct or returned to the manufacturer for disposal.
User seals may only be removed by authorized persons for service purposes and be renewed afterwards. Otherwise the warranty of the equipment is void.

Technical Support
For technical support please contact your local Sontex agent or Sontex SA directly.

Hotline Sontex:
sontex@sontex.ch
+41 32 488 30 04

CE **Declaration of conformity according to R&TTE 1999/5/CE**

The detailed declaration of conformity can be found on our homepage: www.sontex.ch

Technical modifications subject to change without notice
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