General information:

Loop resistance

measurement:





Application:	District heating	
Technical specification: Main functions:	Type of measurement Insulation resistance Loop resistance Galvanic voltage Continuous loop control Control of connection to the pipe	$\begin{array}{c} \textbf{Specification} \\ 0 - 200 \ \text{M}\Omega \\ 0 - 100 \ \text{k}\Omega \\ 0 - 2000 \ \text{mV} \\ \textbf{Triggering of detector} \\ \textbf{by breaking of loop} \\ \textbf{Resistance measurement} \\ \textbf{between supply and return pipe} \end{array}$
Insulation resistance measurement:	Test range Test voltage Test current Accuracy up to $1\ M\Omega$ Accuracy over $M\Omega$	0 - 200 MΩ 24 V max. 100 mA +/- (2% of m. + 8 digits) +/- (5% of m. + 8 digits)

Leak detection and location in resistance network

Test range
Test voltage
Test current
Accuracy
Measurement in both polarities

Measurement in both polarities

0 - 100 kΩ 24 V max. 100 mA +/- (2% of m. + 8 digits)

Galvanic voltage:	Test range Accuracy	0 - 2000 mV +/- 5%
Leak location in resistance pipe network:	Accuracy Location threshold Test results displayed in RATMON syste Test results displayed in % or meters	+/- 2 m +/- 0,2% of measured length $$< 2\ M\Omega$$ em
Communication:	2g/CAT-M/NB-IoT/LAN/MODBUS (RS485)/MODBUS TCP/IP (LAN)/RELAY	
Number of channels:	2 or 4	
Power supply:	12 V DC / 120 - 240 V AC	
Housing:	IP65	
Dimensions:	200 x 150 x 75 mm	
Weight:	0,64 kg	

Software:





RATMON - web application for remote data aquisition and analysis of test results as well as configuration and operation of detectors.



RATMON MOBILE - Android and iOS application for reviewing of pipe loops state.





RAT MANAGER - PC software for configuraton and operation of detectors.

Scope of delivery:

Scope of delivery.	
RAT-2 device with DIN mounting bracket	•
12 V AC/DC power adapter	•
GSM antenna (for devices with GSM module)	
Optional accessories:	
DESCRIPTION	INDEX
Battery module	BAT-1
External GSM antenna	ANT-1
Basic connection box, two loops	BOX-1
Five-core wire connetion box, two loop	BOX-4
BNC/UHF connection box, two loops	BOX-5
M16 6pin connection box, two loops	BOX-6
M16 6pin connection box, one loops	BOX-8
Hermetic power adapter	ZH-1
Grounding	GND-1
M16 6PIN measuring adapter	ZM-16
External cabinet with NEMA certificate	SK-1