





## Features

- Passive UHF transponder chip, protocol compliant to „EPC Class 1 Generation 2 UHF RFID Version 1.0.9”
- Monitoring of time and (chip) temperature over a defined interval and storing in on-chip EEPROM with user defined parameters (event and timing controlled)
- Supply of IC over RFID field and/or connected battery, read and write of EEPROM without battery possible
- 8kBit password protected EEPROM read- and writeable over UHF field and data monitor
- Connection of external functions over SPI interface ( $\mu$ C and display and/or sensors)

## Applications

- Temperature curve tracing for sensitive grocery products and pharmaceutical product logistic (blood and plasma preservation)
- Long range biunique item identification
- Observation of hazardous materials
- With optional external sensors: humidity data surveillance (i.e. paper industry, chemicals), pressure and shock or tilt monitoring of sensitive equipment and appliances

## Parameters

• operating frequency .....	860 .. 960 MHz
• standard conformity .....	EPC Class1 Gen2
• battery supply voltage (typ) .....	1.5 V
• power consumption (max) .....	5 $\mu$ W
• internal EEPROM size .....	512x16
• operating temperature .....	-40 .. 85 °C
• internal sensor precision .....	up to $\pm$ 0.5 K
• timer accuracy .....	$\pm$ 3 %
• read sensitivity (typ) .....	-6 dB
• write sensitivity (typ) .....	-4 dB

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