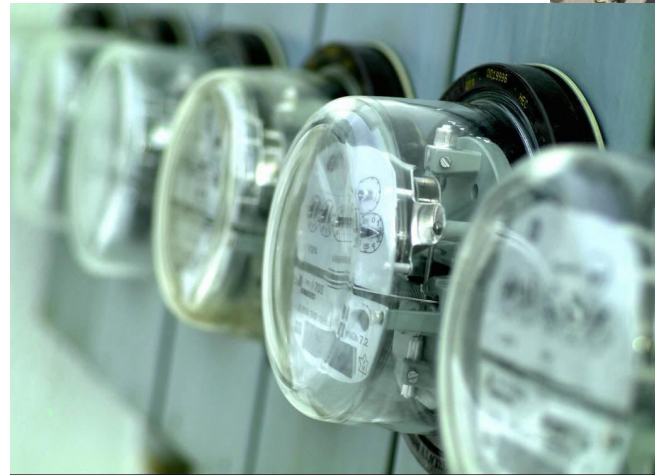


# AUTOMATIC METER READING



169MHz ISM BAND:  
FIRST IN EUROPE



# AUTOMATIC METER READING

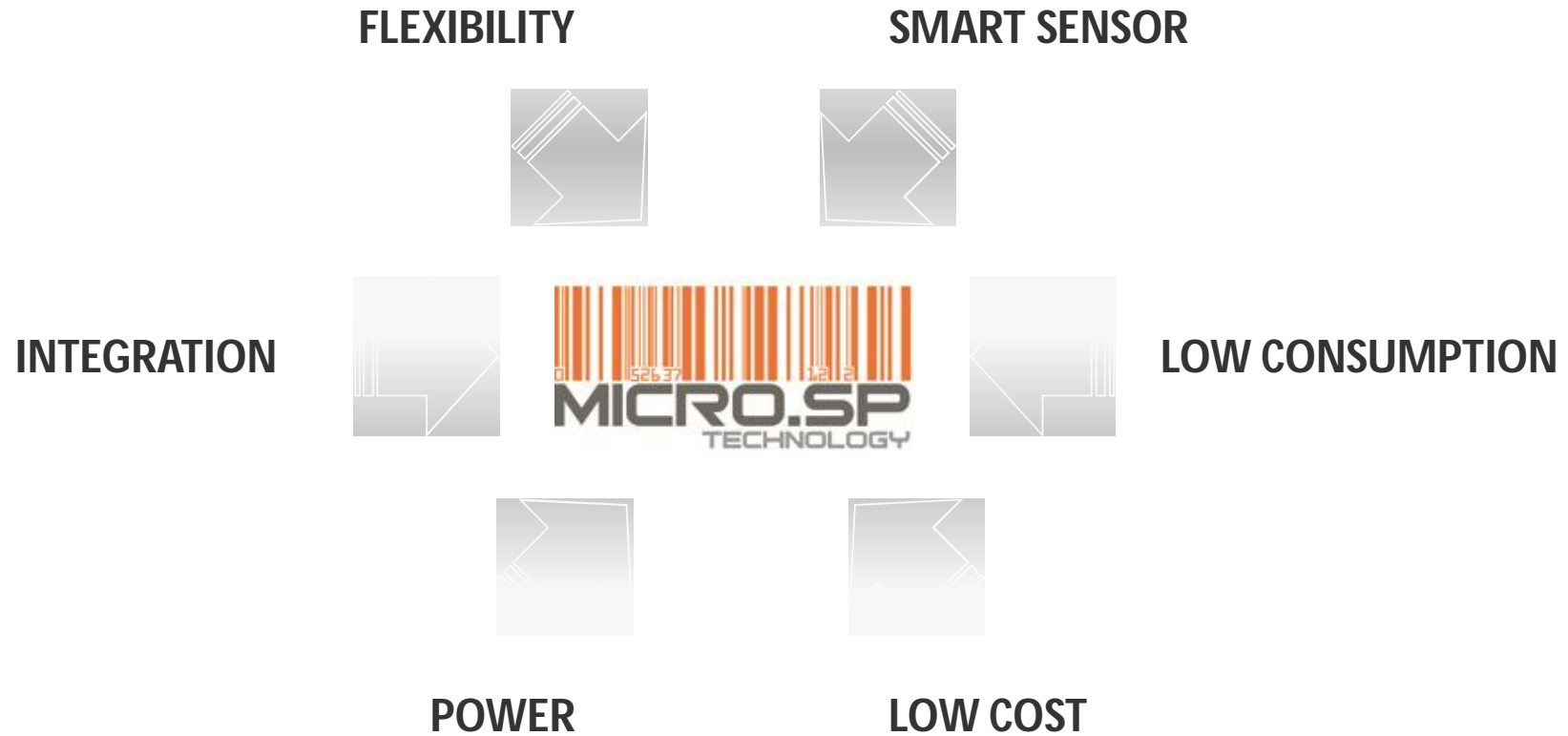


**Mission:**  
**"Everywhere" Wireless Sensors**

We aim to redesign the concept of wireless networks  
sensors solutions for the most innovative approach  
to energy management



# AUTOMATIC METER READING



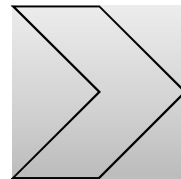
# AUTOMATIC METER READING

MICRO.SP  
NETWORK SENSOR

# AMR



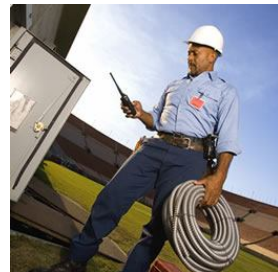
169MHz SENSOR



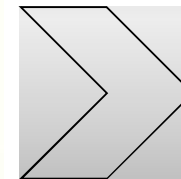
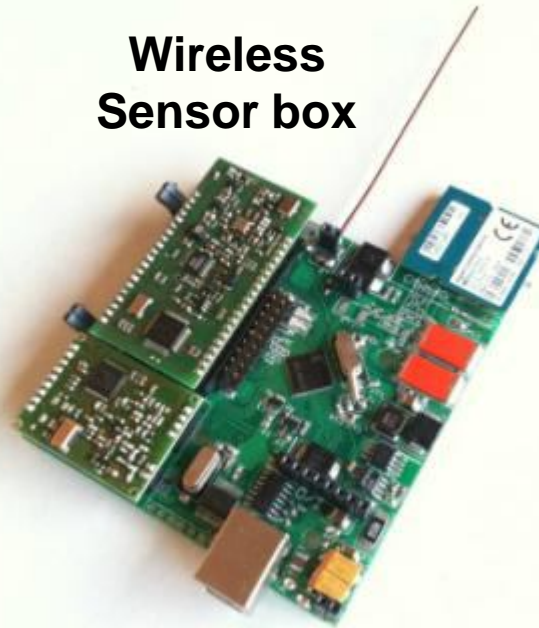
169MHz SENSOR



169MHz SENSOR



Wireless  
Sensor box



MICRO.SP RX  
169 TRX  
GSM/GPRS



# AUTOMATIC METER READING

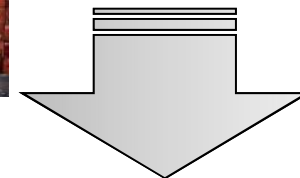
## 169MHz ISM BAND: FIRST IN EUROPE

### Critical Environment

### 169 MHz Technology

First in Europe to introduce new 169 MHz freq. SRD receiver and transmitter for AMR and social alarm applications in UK.

STE has been successfully integrated in market leaders who "designs for leading "tele-care" and "tele-health" solutions, supporting older people and those with long-term needs to live independently, by effectively managing their health and well-being".



**169 MHz**



# AUTOMATIC METER READING



## The environment detection



→ *For Water and Gas Management*

→ *Transportation*

→ *Food Temperature Monitoring*

→ *Environmental monitoring*

→ *Tele-care / Tele-Health*

→ *Asset tracking*



# AUTOMATIC METER READING



169MHZ SOLUTIONS  
TRANSCEIVER

# 169 MHz

## ***BK2 TRANSCEIVER***

*Low cost, high performances data  
based on Analog Device ADF7021-N.*

*Applications 169 MHz Band:*

- ✓ ***AUTOMATIC METER READING***
- ✓ *Tracing & Asset Tracking*
- ✓ *Social Alarms*
- ✓ *Remote Control*
- ✓ *Domotics*



# AUTOMATIC METER READING



169MHz SOLUTIONS  
TRANSCEIVER

# 169 MHz

*BK2 TRANSCEIVER*

*169MHz 200mW*

*434MHz 25mW*

*868MHz 25mW*

*868MHz 200mW*

*915MHz 20mW*

*915MHz 200mW*



# AUTOMATIC METER READING



**169MHZ SOLUTIONS  
TRANSCEIVER**

**169 MHz**

TABLE 1 PERFORMANCE DATA BK2x – RECEIVER SECTION	
Frequency	80 to 650 MHz / 842 to 916 MHz <sup>1</sup>
Modulation	2FSK ÷ GFSK ÷ RCFSK ÷ 3FSK ÷ 4FSK
Receiver sensitivity	-122DbM 1 KBPS with 2FSK Modulation
Channel Selectivity	9 KHz 13,5 KHz 18,5 KHz
Data rate	Default 1 kbps Max 18 kbps
Supply current	Average : 20 mA Power Down : 100 nA
Supply Voltage	3.3 VDC ± 5%
Operating temperature range	-40°C ÷ 85°C
Storage temperature range	+65°C ÷ 125°C



TABLE 1 PERFORMANCE DATA BK2x – TRANSMITTER SECTION	
Frequency	80 to 650 MHz / 842 to 916 MHz <sup>1</sup>
Modulation	2FSK ÷ GFSK ÷ RCFSK ÷ 3FSK ÷ 4FSK
Output RF power	Typical +10 dBm Max +23 dBm
Data rate	Default 1 kbps Max 18 kbps
Supply current	Active : 25 mA Power Down : 100 nA
Supply Voltage	3.3 VDC ± 5%
Operating temperature range	-40°C ÷ 85°C
Storage temperature range	+65°C ÷ 125°C



# AUTOMATIC METER READING

**WIRELESS M-BUS SOLUTIONS  
TRANSCEIVER**

**M-BUS**

***NEW RELEASE***

***BK2-M TRANSCEIVER***

***WIRELESS M-BUS PROTOCOL***

Low cost, high performances data transceiver based on

TEXAS INSTRUMENTS **CC1125**

TEXAS INSTRUMENTS **CC1190**

TEXAS INSTRUMENTS **MSP2272**



Applications supported:

- ✓ **AUTOMATIC METER READING**
- ✓ Tracing & Asset Tracking
- ✓ Social Alarms
- ✓ Remote Control
- ✓ Domotics

**SOP 3rd QUARTER OF 2011**

# AUTOMATIC METER READING

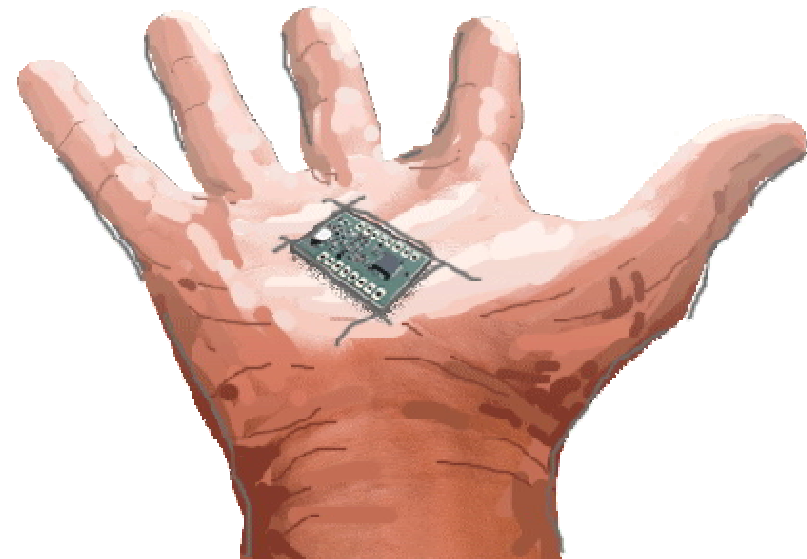
MICRO.SP  
PRODUCTS OVERVIEW

# SPT17

*Wireless system operating for many years when supplied with a small battery as well.*

*Suggested applications:*

- ✓ *State life control,*
- ✓ *Alarms,*
- ✓ *Sensors,*
- ✓ *Tracking and asset tracing.*



# SPT17S3

MICRO.SP  
PRODUCTS OVERVIEW

# SPT27

## ACTIVE RFID TAGGING

*Typical applications:*

- ✓ Access control,
- ✓ Active RFID tagging,
- ✓ Asset Control,
- ✓ Asset Tracking.



# SPT27S3

# AUTOMATIC METER READING

MICRO.SP  
PRODUCTS OVERVIEW

# SPS107

## **SPS107 TEMPERATURE / HUMIDITY WIRELESS SENSOR** **SPT17S3-TH1**

*The SPS107 is a wireless sensor transmitter:*

- *microprocessor controlled digital temperature and humidity sensors*
- *two on-off input for alarm or control purposes.*
- *434MHz license free band.*
- *PROPRIETARY "Micro.SP" Ste Patented Short Pulse RF technology*
- *Support Ultra Low Consumption.*

*The SPS107MA is the version encased in a compact ABS enclosure.*

# SPS107



# AUTOMATIC METER READING



## Ste Ksolutions Contacts

Via Bistolfi 49 – 20134 Milano

Tel: 02 26411765

Fax: 02 2640118

### Mail:

[info@ste-ksolutions.com](mailto:info@ste-ksolutions.com)

[m.moiraghi@ste-ksolutions.com](mailto:m.moiraghi@ste-ksolutions.com)

