LIVE MONITORING AND CONTROL VIA RADIO with long battery life

Use Cases:
Energy Management, Asset Tracking, Machine Monitoring

sysWORXX SRN-300 – Short range radio node for sensors and actuators with a battery life of up to 3 years incl. mesh network functionality
WE MAKE MACHINES READABLE

OUR sysWORXX IoT ECOSYSTEM
SOFTWARE DETAILS sysWORXX SRN-300

SYSTEM SOFTWARE

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<th>Firmware</th>
<th>Application with Wirepas Mesh Network</th>
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BLUETOOTH VS. WIREPAS MESH NETZWERK

Estimated battery life of sysWORXX SRN-300 with

- Bluetooth Mesh: 14 days*
- Wirepas Mesh: 1-5 years*

*heavily dependent on network and node configuration

MESH NETWORK TOPOLOGY

Node Roles:
- Router = Head Node
- Non-router = Sub Node / Leaf Node
- Sink = Gateway to Internet
USE CASES FOR THE INDUSTRY 4.0

TRACKING OF GOODS
Efficiency increase through monitoring in industry/production

ADVANTAGES sysWORXX SRN-300

- Radio interface for sensors and actuators
- Software stack allows activation only if it's necessary
- Result: extremely low battery consumption with battery life of 1-3 years
- Suitable for mesh networks (details see software details)
- Measurement of any physical quantities of a machine - no dependency of exclusively single physical quantities of a machine
- NFC antenna for provisioning
- 4 LEDs to indicate the device status make commissioning easier (power LED for 24V supply, 2x status LED for DI0 and DI1)
USE CASES FOR THE INDUSTRY 4.0

ENERGY MANAGEMENT
Monitoring of stationary and mobile energy systems

HARDWARE DETAILS sysWORXX SRN-300

- Mountable on DIN Rail
- SoC
  - Nordic Semiconductor nRF52832
  - Cortex-M4F, 64 MHz
  - 64 kB RAM on-chip, 512 kB Flash on-chip
- Power Supply
  - Battery: 2x CR2477
  - 24V supply: 9...28V
- Connectivity
  - 2.4 GHz Transceiver with external antenna
  - NFC-A tag emulation for mesh network provisioning

block diagram sysWORXX SRN-300
FROM THE IDEA TO SERIES PRODUCTION