

s-net®

Wireless networks and positioning for local IoT applications

s-net® lays the foundation for connecting and positioning things, machines, components and people, thus closing an information gap between IT and the real world.

What s-net® really brings into the limelight are the benefits it provides for IoT applications. As IoT devices require low power consumption and the possibility to communicate in the most challenging locations, s-net® is a prime candidate for solving these problems. s-net® permits the low power and complexity these devices need by respecting limited bandwidth and the high positioning accuracy expected in many applications.

Our advisory and development services enable you to quickly realize your own IoT solution for your specific project. With more than 20 years of experience in wireless technology, the expertise of more than 50 computer scientists, electrical engineers and management experts, and thorough familiarity with applications in production, logistics, security, smart city and smart building, we can help you successfully use the s-net® technology for your application.

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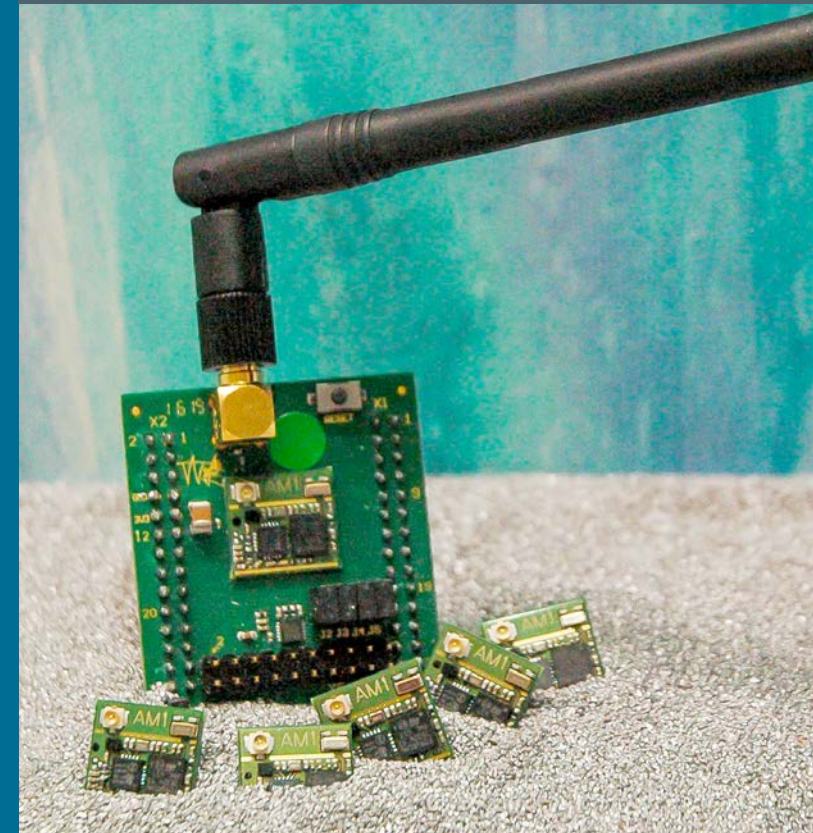
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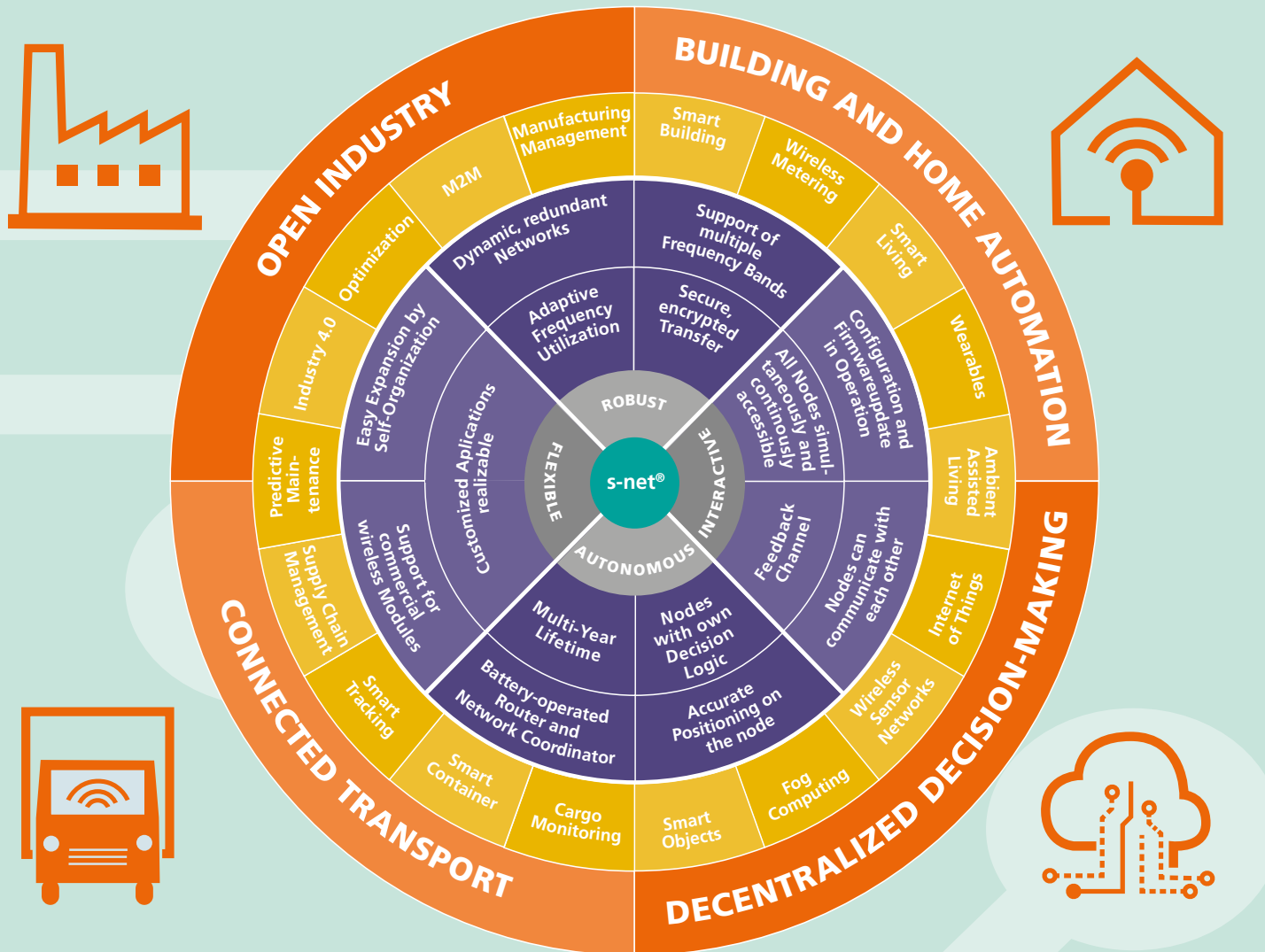
s-net® A SMART WAY TO IMPLEMENT WIRELESS NETWORKS

Energy-saving communication technology for cyber-physical systems, fog computing and the Internet of Things IoT



s-net® APPLICATIONS AND ADVANTAGES

s-net® TECHNOLOGY AND FACTS



NETWORKS



Data throughput

- up to 255 byte/s per Node
- up to 512 byte/s per Frame per Network

Communication

- self-organizing
- bidirectional
- multi-hop

Technology

- Low Throughput Network LTN

Positioning

- spatially accurate within the network

Frequency Band

- 433 MHz
- 868 MHz
- 2,4 GHz

Range (per Frame)

- over 300 m Indoors
- over 3 km Outdoors

Number of Nodes (per network)

- up to 16.000 Nodes

Network Capacity

- 1.600 Pakets per hour

HARDWARE



Size

- 5 cm x 4 cm x 1 cm

Memory per node

- 512 kbyte

Infrastructure Costs

- more than 50% lower than comparable Technologies

CONSUMPTION



Power Consumption

- over 90% less in multi-hop operation than comparable Technologies

Energy Efficiency

- 175 nWh per Data Packet

Lifespan

- more than 12 Years