



True Low Power™

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years on
a
battery*

TR-76D power consumption example

- Deep sleep mode: < 100 nA
- Run mode
 - RF sleep: 1.6 mA
 - RF ready: 3.0 mA
- TX mode: 8.3 - 19 mA
- Sleep mode: < 1 µA
- RX mode
 - STD: 12.3 mA
 - LP: 233 µA
 - XLP: 15 µA

Look at other RF platforms boasting ultra/extra low power.

IQRF lifetime* for 1 Ah, 3.6 V, ½ AA sized battery:

- 1000 years in Deep sleep
- 7 years continually receiving in XLP**
- 300 MB data received
- 200 MB data transmitted (at highest RF output power)

* Theoretical values

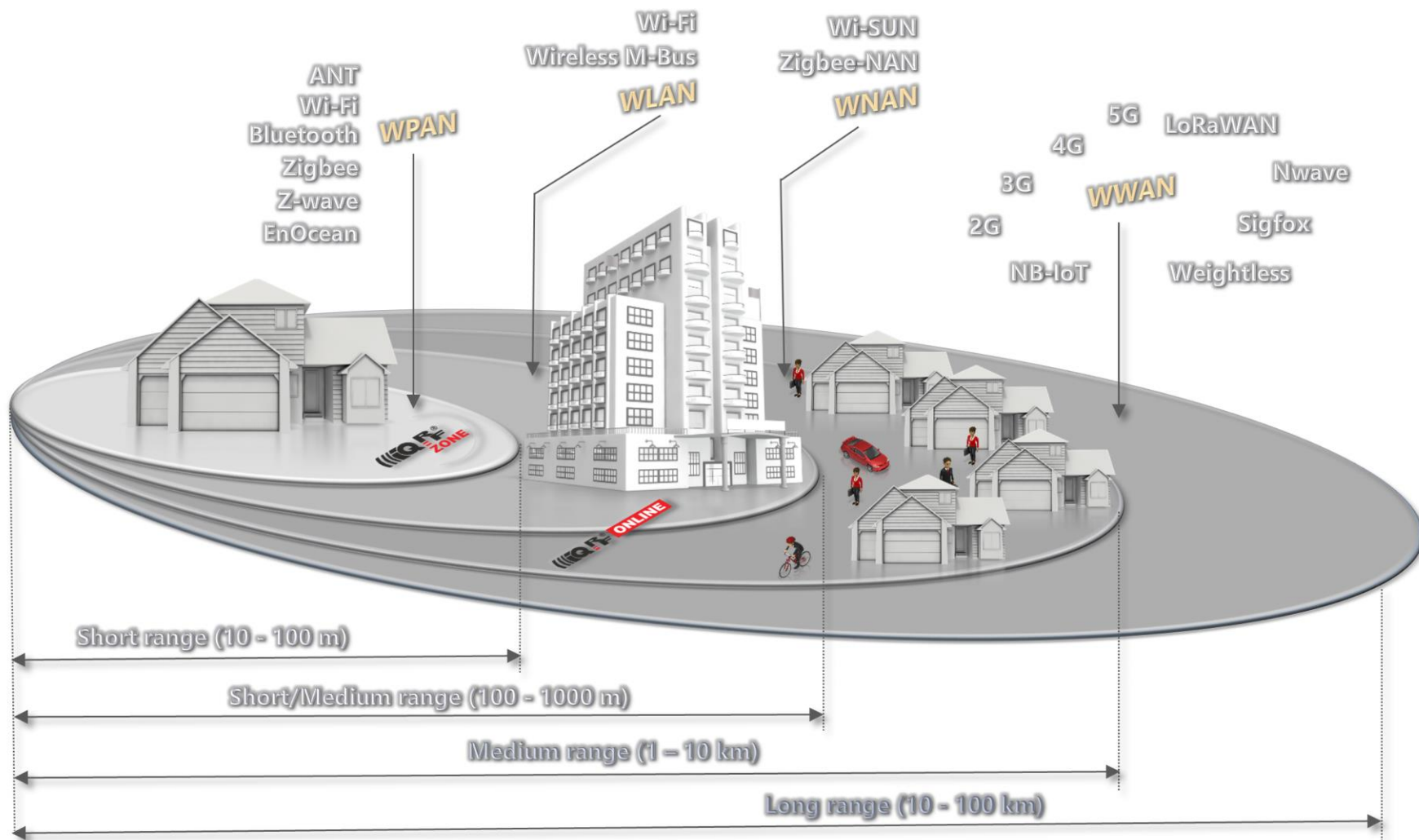
** Without an incoming RF signal including a noise

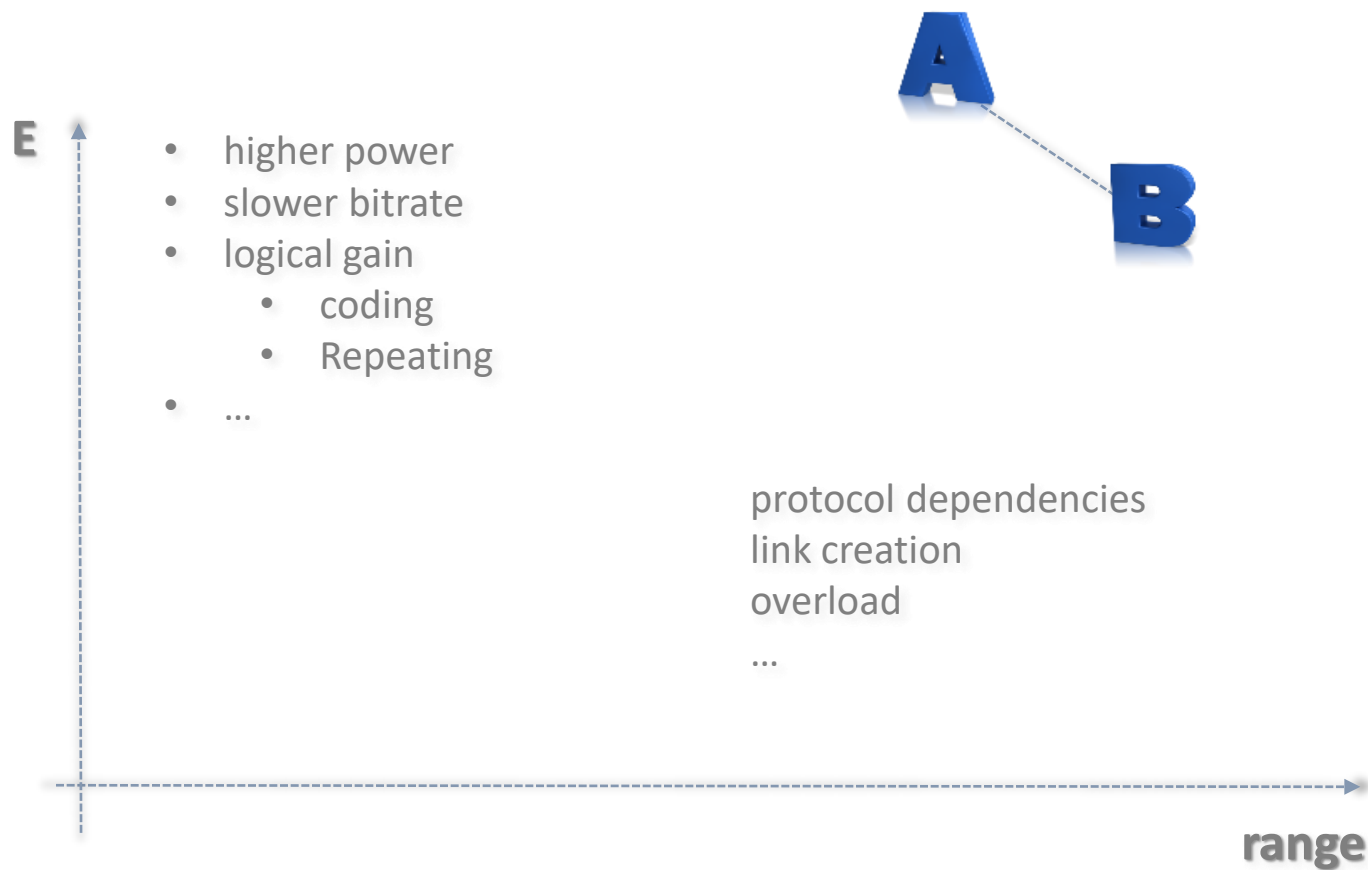
Ultra
low
power

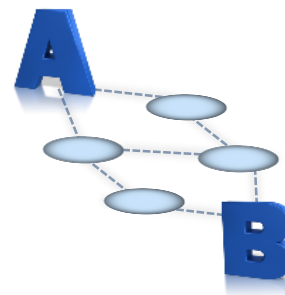
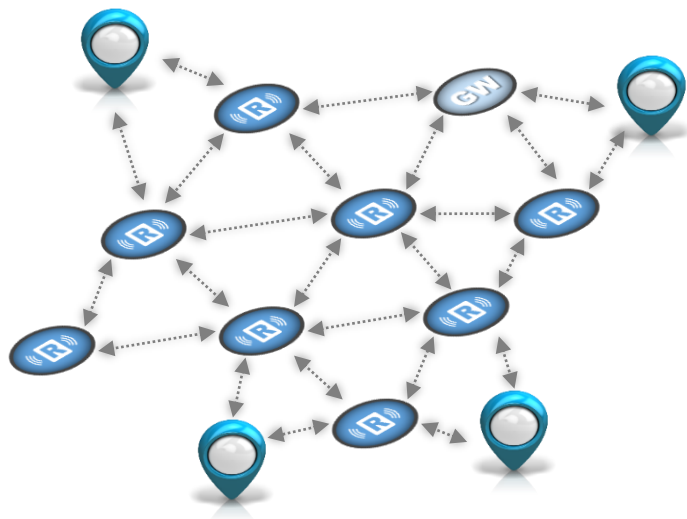
Super
low
power

Extra
low
power

10 years
on a
battery*





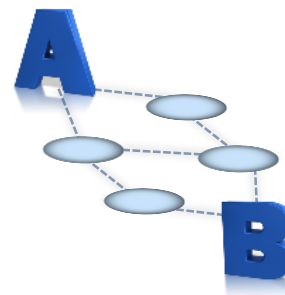
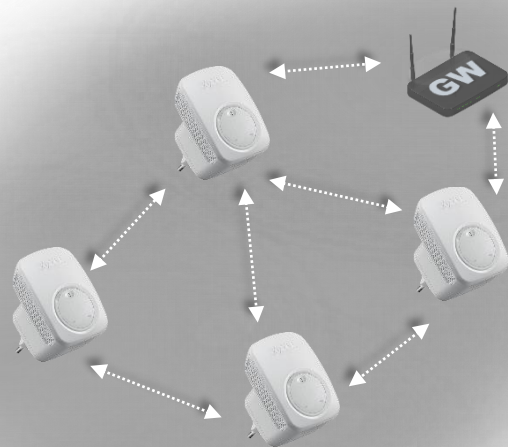


Routing enables A to reach B



True Low Power™

Wireless mesh networks with dedicated repeaters



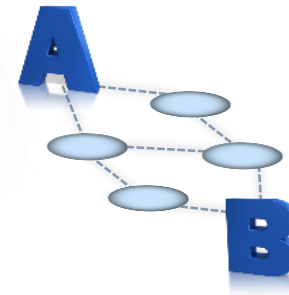
Dedicated repeaters create communication infrastructure

The IQRF® is growing ecosystem and horizontal platform based on a mature wireless mesh technology.



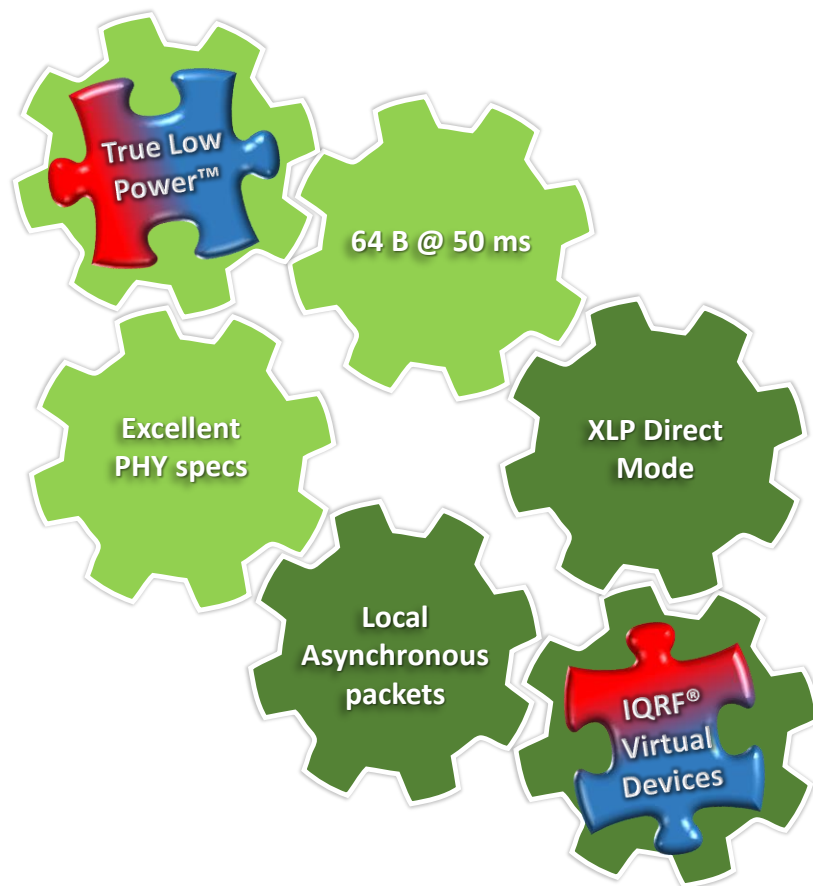
True Low Power™

Wireless mesh networks with
dedicated repeaters



Devices are communicating locally with minimum *invested* energy.

The IQRF® is growing ecosystem and horizontal platform based on a mature wireless mesh technology.



Controllers

- Normally sleeping device, activated by user
- Life expectancy: years
- **True life expectancy: >100.000 events**



Sensors

- Sending data when needed
- Life expectancy: years
- **True life expectancy: >100.000 events**



Actuators

- Battery operated device processing commands
- **True life expectancy: years being online**





True Low Power™

The true measure for the real applications.