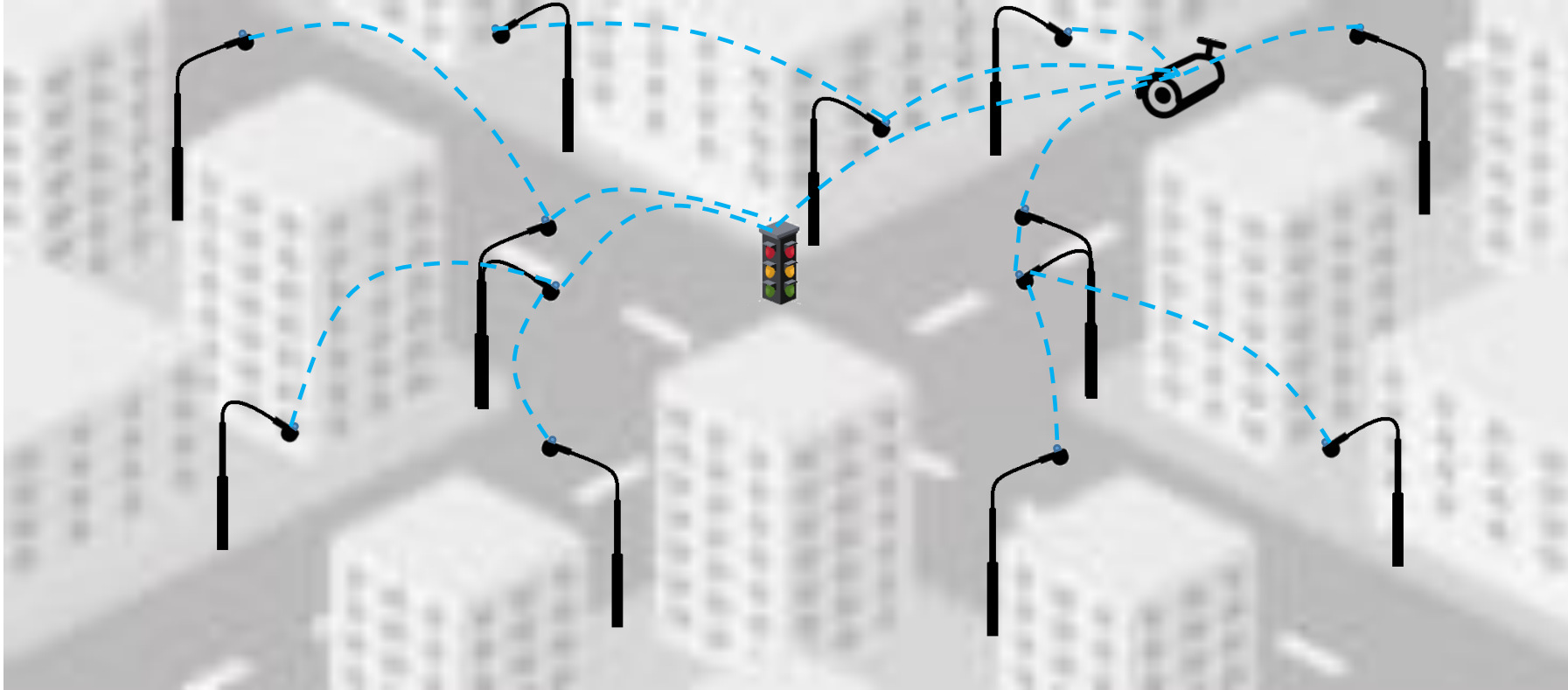
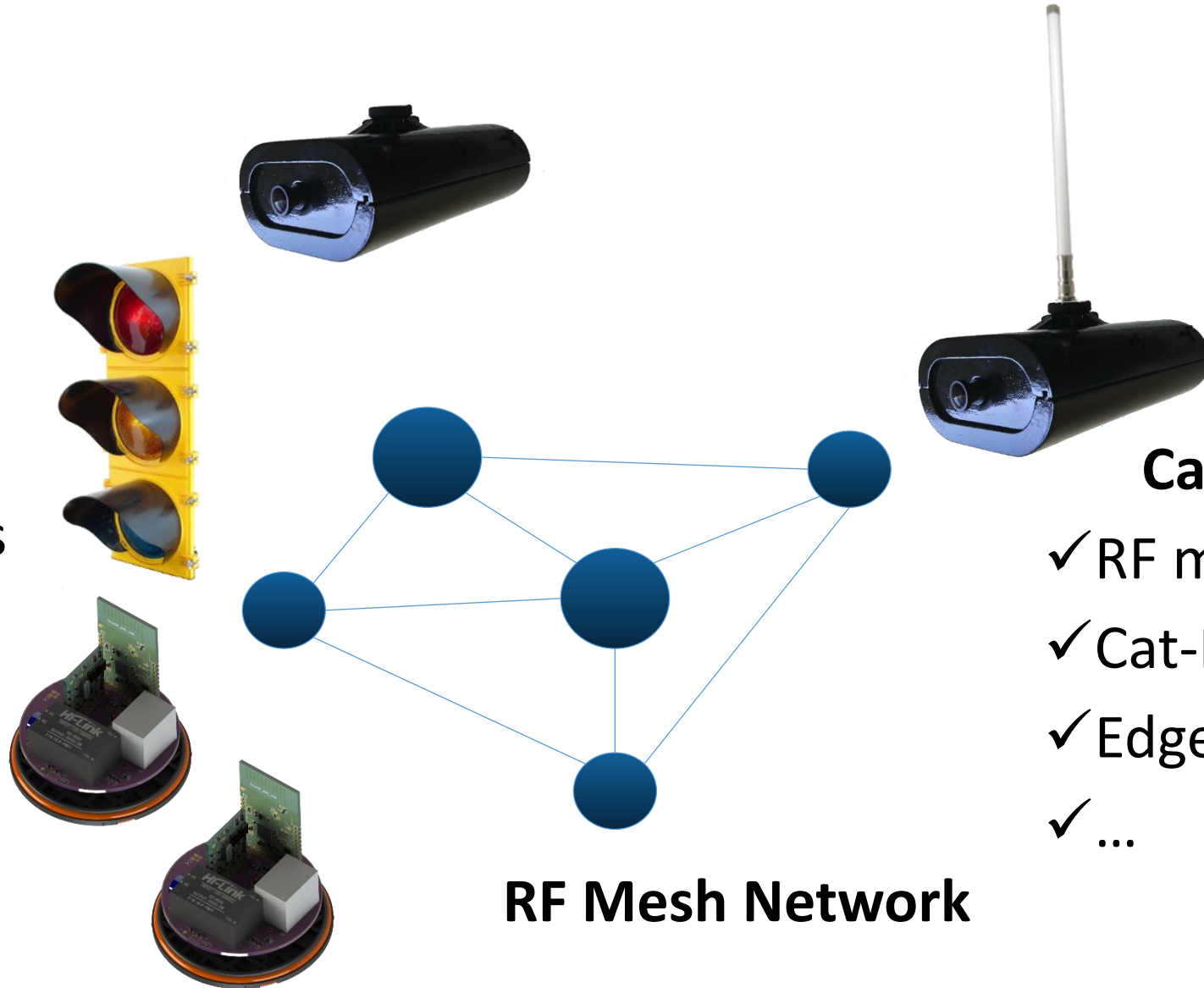




Smart city with connected smart cameras, smart photocells, and light signals.

Endpoints

- ✓ Smart Camera
- ✓ Light signals
- ✓ Smart Photocells

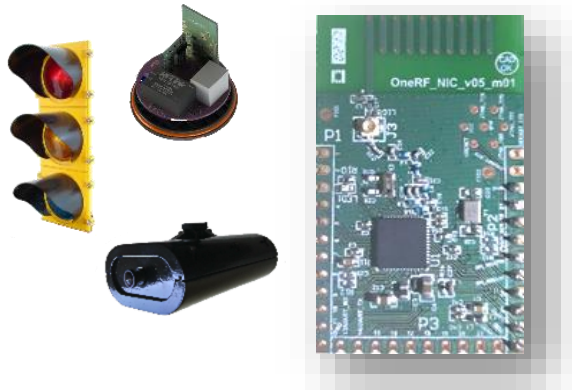


Camera Gateway

- ✓ RF mesh
- ✓ Cat-M
- ✓ Edge processing
- ✓ ...

RF Mesh Network

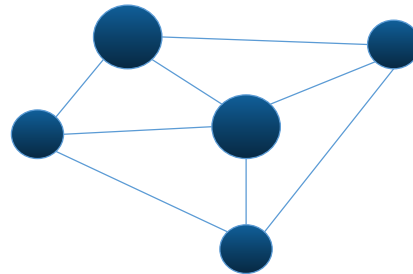
Endpoints



Radio (HW e FW):

- ✓ External or embedded antenna
- ✓ 915 MHz
- ✓ 25mW/2KM or 1W/10KM
- ✓ IPv6, 50kbps
- ✓ Power save mode
- ✓ Local processing
- ✓ Optimized communication - CoAP

Network infrastructure



Network (HW e FW):

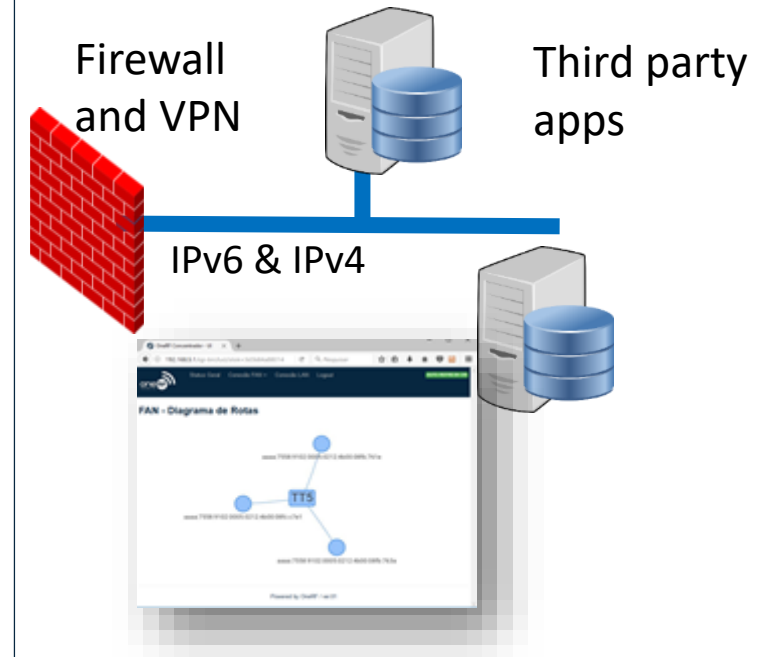
- ✓ MESH topology, IPv6
- ✓ self-healing
- ✓ Plug & Play
- ✓ Firmware over the air
- ✓ AES-128 cryptography/Digital Certificate

Camera Gateway:

- ✓ Outdoor and Indoor
- ✓ VPN, Cat-M, ETH, Wi-Fi



Datacenter/Cloud



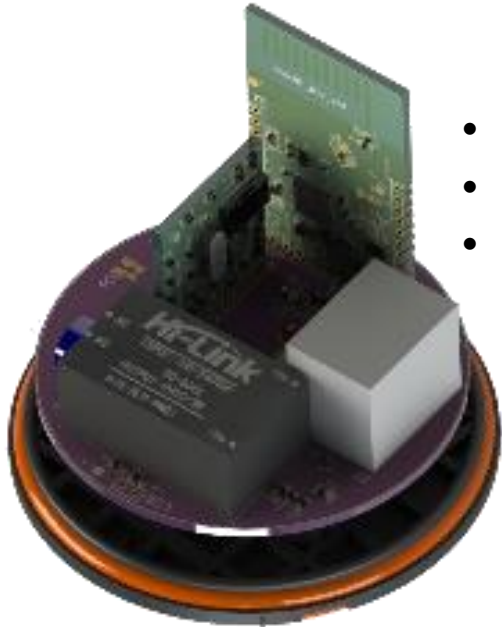
Net management software (NMS)

- ✓ Monitor net elements
- ✓ RF MESH routes
- ✓ SNMP

Smart Photocell

Functionalities

- Remote control on/off
- Light sensor
- Power monitoring:
 - Voltage RMS
 - Current RMS
 - Active power
 - Reactive power
 - Power factor
 - Frequency
 - Accumulated consumption
- Dimmer 0-10V/PWM
- Temperature sensor
- Parametrization / programmed dimmer.



Technical features

- Voltage input: 100-240Vac 50/60Hz
- Consumption: < 1W
- Load power: 16A - 250 Vac
- IP67
- Encapsulation: pin ANSI C136.41
- Temperature range: -20° + 85° C
- Class 2 energy metering
- Communication RF MESH - 915 MHz



Connected Light Signal

Functionalities

- Remote control
- Operation modes:
 - Normal
 - Alert
 - Error
- Temperature sensor
- Parametrization of timing

Technical features

- Voltage input: 100-240Vac 50/60Hz
- IP67
- Temperature range: -20° + 85° C
- Communication RF MESH - 915 MHz



Smart Camera

Functionalities

- Remote control
- Edge processing
 - Deep learning
 - Image processing
- Temperature sensor

Technical features

- Voltage input: 100-240Vac 50/60Hz
- Temperature range: -20° + 85° C
- Snapdragon 410/820
- Communication RF MESH - 915 MHz



Camera Gateway

Functionalities

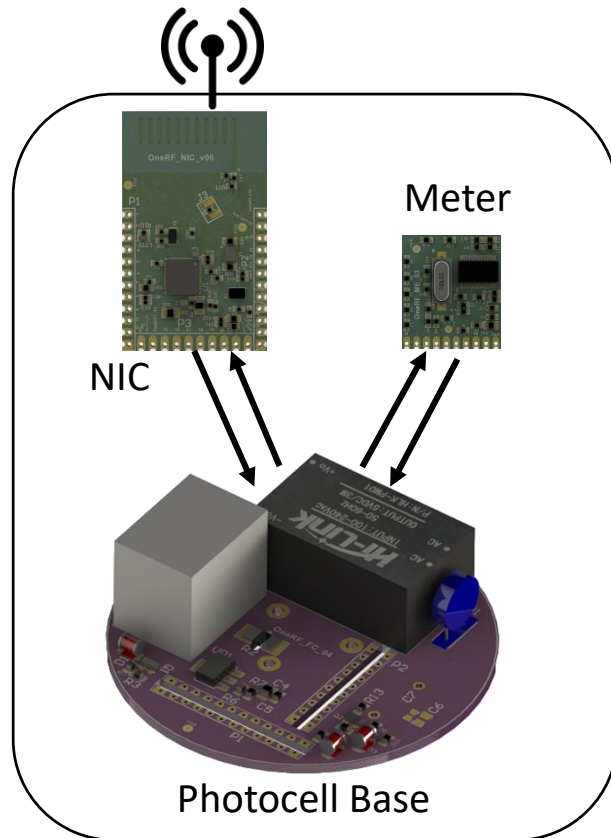
- Remote control
- Gateway features
- Edge processing
 - Deep learning
 - Image processing
- Temperature sensor



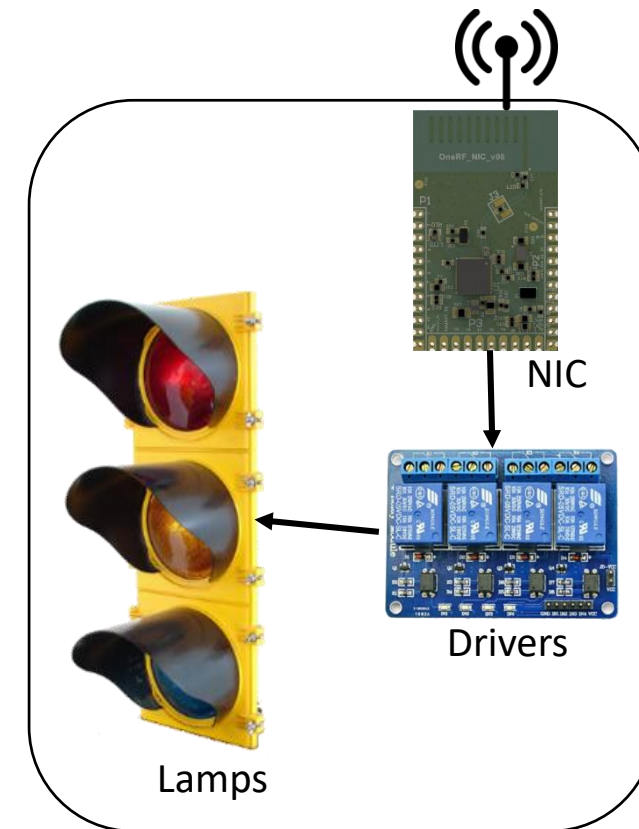
Technical features

- Voltage input: 100-240Vac 50/60Hz
- Temperature range: -20° + 85° C
- Snapdragon 820
- Communication RF MESH - 915 MHz
- Communication Cat-M

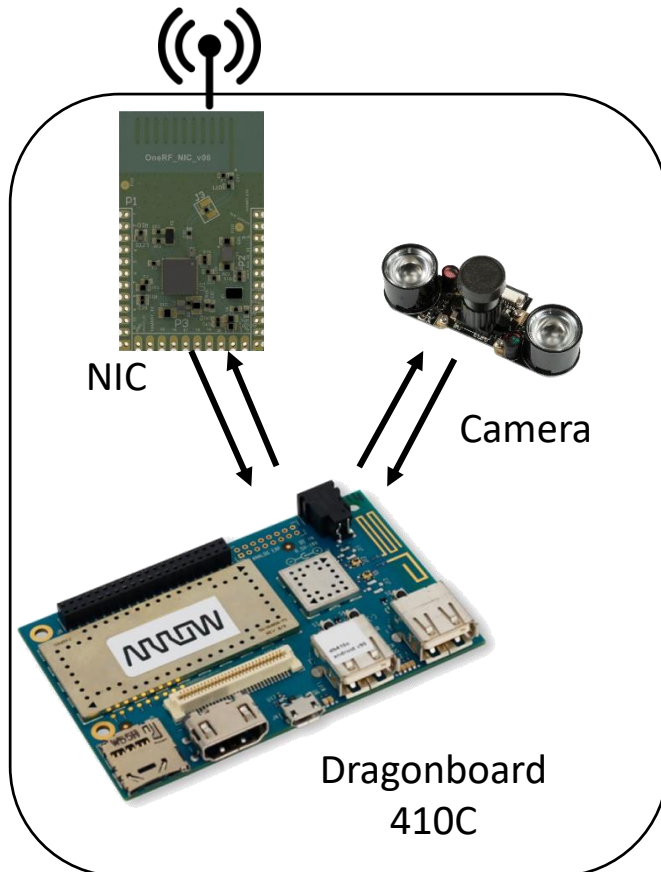
Smart Photocell



Light Signal



Smart Camera



Camera Gateway

