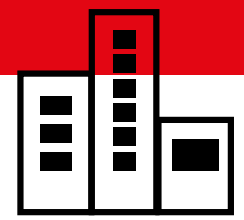


# Smart City



## Needs

Communication for smart applications

Energy availability permanently

## Communication

NB Powerline  
5 kB/s

A

NB RF Mesh  
100 kB/s

B

BB Powerline  
200 MB/s

C

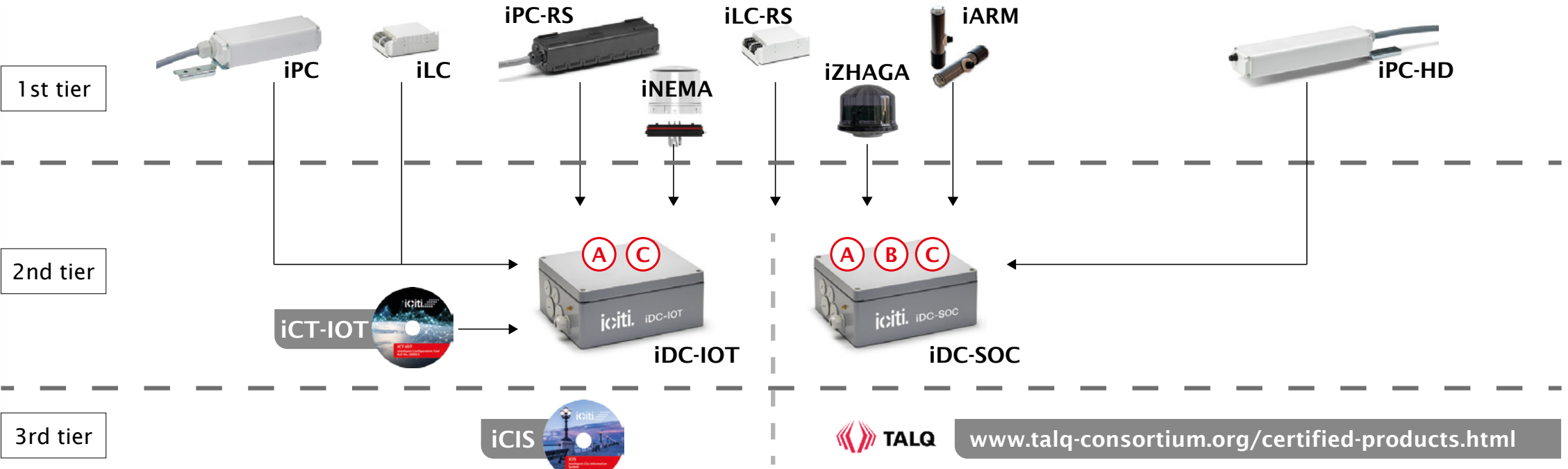
## Applications

Diagnostic information, Control and Monitoring the illumination

Diagnostic information, Control and Monitoring the illumination, Waste and Parking Management, ...

Diagnostic information, Control and Monitoring the illumination, WLAN Accesspoint, Speech, Pictures, TV/HD-TV, Emergency Call

## Architecture / Product types



## Benefits

Interoperable

Open protocol

DALI / DALI2 / 1-10 V / PWM

Lifespan independent

Provider independently

Manufacturer independently

First/Second source

## Functions / Features

Product category	1 <sup>st</sup> tier							2 <sup>nd</sup> tier			3 <sup>rd</sup> tier		RF Module for RF Mesh Operation	Powerline Interface		Filter
	Luminaire Controller							Edge Controller	Software							
Product type	iLC	iPC	iLC-RS	iPC-RS	iNEMA	iZHAGA	iPC-HD	iDC-SOC	iDC-IOT	iCT-IOT	iCIS	LMS via TALQ	iARM	iPL-NI	iLON-PLT	iPL-FI
On/Off	✓	✓	✓	✓	✓	✓	✓	—	—	—	✓	✓	—	—	—	—
Dimming	✓	✓	✓	✓	✓	✓	✓	—	—	—	✓	✓	—	—	—	—
Power reduction via second relay / second luminaire	—	✓	—	✓	—	—	✓	—	—	—	✓	✓	—	—	—	—
Band width (gross)	Narrowband 5 kB	Narrowband 5 kB	Narrowband RF Mesh 200 kB	Narrowband RF Mesh 200 kB	Narrowband RF Mesh 200 kB	Narrowband RF Mesh 200 kB	Broadband 240 MB	Narrowband / Broadband / Wireless Mesh via iARM	Narrowband / Broadband	—	—	—	—	—	—	—
IP interface for control	—	—	—	—	—	—	✓	—	—	—	—	—	—	—	—	—
Number of repeaters	5	5	100	100	100	100	10	—	—	—	—	—	—	—	—	—
Operation with switched lighting cable	✓	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—
Stand-alone operation	✓	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—	—
Light measurement via external/internal sensor	—	✓	—	—	✓	✓	—	—	—	—	—	—	—	—	—	—
Transmission to other Powerline networks	iCCU	iCCU	—	—	—	—	—	iCCU (NB-PLC)	iCCU (NB-PLC)	—	—	—	—	—	—	—
Subsequent parameterisation + test operation	iPL-NI / iLON-PLT	iPL-NI / iLON-PLT	USB-RFM	USB-RFM	USB-RFM	USB-RFM	—	—	—	—	—	—	—	—	—	—
Connection of the field level to the control center	✓	✓	✓	✓	✓	✓	✓	MQTT / REST / OPC-UA / TALQ	MQTT / REST / OPC-UA	—	XML / SOAP and MQTT / REST / OPC-UA	MQTT / REST / OPC-UA / TALQ	—	—	—	—
Commissioning	iCT-IOT	iCT-IOT	iCT-IOT	iCT-IOT	iCT-IOT	—	iCT-IOT	—	iCT-IOT	✓	—	—	—	—	—	—
Control, parameterisation, evaluation and display of the lighting system status via LMS	—	—	—	—	—	—	—	—	iCIS	—	✓	✓	—	—	—	—
Information center for further smart city applications	—	—	—	—	—	—	—	—	—	—	✓	✓	—	—	—	—
Filtering network disturbances (Powerline)	iPL-FI	iPL-FI	—	—	—	—	—	iPL-FI (NB-PLC)	iPL-FI (NB-PLC)	—	—	—	—	—	—	✓
Product status	available	available	coming soon	coming soon	coming soon	available	available	available	available	available	available	coming soon	available	available	available	available