



# LiXia PUK

*Pervasive Ubiquitous Knowledge*

LiXia provides insights – through hardware  
**AND** advanced Analytics, Artificial  
Intelligence and Machine Learning.

- Like a digital skin, our devices can transform infrastructure into data collecting assets.
- Reduce manual inspections, receive alerts for critical set points
- Transform your static digital twin into a live dynamic digital twin!
- Move from point in time data to real time intelligence
- From the city to the bush, our devices can communicate insights through a broad range of telecommunication types, including low earth satellites!

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## APPLICATIONS



### **Power Pole Monitoring**

Structural health:  
tilt, twist, roll



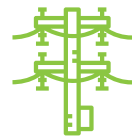
### **Emergency Management**

River height, flash  
flooding, water  
over the road, fire



### **Smart Cities**

Microclimate,  
security, vehicle and  
people counts



### **Conductor Monitoring**

Sag and  
clearance

A standalone gateway  
installation, able to support  
500+ LiXia devices



## HARDWARE

- Solar charged; battery operated
- Flexible Communications - LoRaWAN, NBIoT, LTE, 4G, 5G
- IP67 rated enclosure
- Formfactor is designed for rapid install
- Edge computing and low bandwidth communications for ultra low power and transmission packets

## SENSOR OPTIONS

- Microclimate (Temperature, Humidity, Barometric Pressure)
- Wind Speed and Direction<sup>1</sup>
- Rainfall intensity and accumulation<sup>1</sup>
- Acceleration and Alignment
- Solar radiation
- LiDAR
- Image Capture (Conductor Sag, Vegetation ingress)
- Volatile Organic Compounds (VOCs)

<sup>1</sup> Measured at the Gateway

