Smart Factory - LoryNet®

Make your factory smart with LoRa !

Server
- Smart Phone —))) WiFi
- Server
- PC

Internet
- INTERNET

Gateway
- LoRa (((— LoryGate
- docomo au SoftBank

Converter/Repeater
- Smart Phone — HIMALAYA TALK
- Lory —))) LoRa
- sLory — Serial
- uLory — LoRa ((( )
- LoryNet

Sensor Node
-))) LoRa — ioLory
- rLory — (((LoRa
- Obstacle
- sLory — Serial

Sensor/Actuator
- Moter
- Portsensor
- Solenoid valve
- Light sensor
- RTD temp. sensor
- Light bar

Field
- AUTOMATION
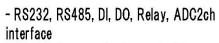- INDUSTRY

iWorks

Make your factory smart with LoRa!

Smart Factory LoryNet®

ioLory
LoRa to I/O sensor node

- RS232, RS485, DI, DO, Relay, ADC2ch interface
- provide Easy-to-Configure Serial over IP (COM Port Redirector)
- able to communicate 10km distance in open area

LoryGate
LoRa to WAN Gateway

- 10/100Mbps RJ45 Ethernet Port
- RS232/422/485 interface
- Modbus/TCP, MQTT protocol
- Serial over IP ComRedirector
- able to communicate 10km distance in open area

uLory
LoRa to USB Converter

- connect LoRa communicaiotn to PC
- USB 2.0 interface
- able to communicate 10km distance in open area

sLory
LoRa to Serial Converter

- Serial communication to LoRa communication
- RS232/422/485 interface
- max. communication speed 115.2Kbps
- able to communicate 10km distance in open area

rLory
LoRa Repeater

- LoRa to LoRa repeater
- obstructions bypass feature
- provide RS232 setup port
- retransmission etc. various setting
- able to communicate 10km distance in open area

Lory
LoRa to BLE Converter

- Bluetooth(BLE) to LoRa® Converter
- Li-polymer battery
- send messages and locations where no mobile services
- send emergency signal, GPS location and text to Lory® via HimalayaTalk®
- able to communicate 10km distance in open area

Lory2
LoRa to BLE Converter

- Bluetooth(BLE) to LoRa® Converter
- Li-polymer battery with Solor Panel
- send messages and locations where no mobile services
- Voice to Text Converter

LPWA比較	LoRa	ZigBee	WiSUN	HaLow	Sigfox
距離	100〜10km	100m	1km	1km	3〜10km 30〜50km
速度	980〜110kbps	20k〜250kbps	50k〜400kbps	〜150kbps	〜100bps
電力	0.001mA 20mA 通信中				
団体	LoRa alliance	ZigBee alliance	WiSUN alliance	WiFi alliance	
特徴			日本のみ	規格策定中	仕様開示無し