Robustel Company Introduction

Make Things Connected

Table of contents

About *Robustel*

Robustel is a cellular router & Gateway manufacturer specialising in 5G, 4G/LTE & LPWAN devices. Our products are used in smart cities, transportation, utilities, energy and Industrial IoT and many other applications to deliver robust and reliable connectivity.

Founded in 2010 in Guangzhou, China - Robustel has been concentrating on producing the highest quality IoT products possible.

Reliable IIoT Connectivity and Computing

Intelligent Equipment Solution Co-creation Service

Service Lifecycle Management

EHS Eco IoT Suite

13 years Accumulation	**11+** Overseas Office	**10,000+** Customers	China **Specialized & New** 'Little Giant' Key Enterprise
10%+ R&D Investment as a Percentage of Revenue	**100+** Countries and Regions	**2 million +** Global Networking Devices	**Guangdong 5G+IIoT (Robustel) Engineering Technology Research Center**

robustel

Enterprise development history

Industrial Digital Intelligence Empowerment

- **2019**
  - Upgrade RobustLink cloud platform to RCMS IoT cloud service
  - Jointly set up "Internet of Things Experiment" with South China University of Technology Professional courses to create school-enterprise cooperation

- **2020**
  - Released the R5020 industrial 5G router
  - Release the elevator IoT multi-source fusion smart sensor
  - Completed the B round of financing

- **2021**
  - Release AIoT+ cloud-side solutions and services for the elevator industry
  - National Specialized Special New Little Giant Enterprise
  - Completed C and C+ rounds of financing

- **2022**
  - Release RobustOS Pro edge computing operating system
  - Release the RobustConnect Smart Object Collaborative Cloud Platform
  - National -level specialized special new key "little giant" enterprise
  - Southern Industry Think Tank Industrial Internet Innovation Index Guangzhou No. 1
  - Listed on the New Third Board, stock code: 873791
  - Robustel's AI application was selected into the list of "National Artificial Intelligence Innovation and Application Pioneering Area "Smart Fusion Hundred Scenes"" by the Ministry of Industry and Information Technology

- **2023**
  - Cooperated with Yiou to release the white paper on smart maintenance and supervision of elevators in China
  - Release Robustel service-oriented manufacturing transformation white paper
  - Organized "5G+Industrial Internet Conference for Small and Medium Manufacturing Enterprises".
  - Selected as one of the key industrial Internet service platforms in Guangzhou, China.
  - Deloitte China's "2022 Guangdong, Hong Kong and Macao Greater Bay Area Hi-Tech High Growth Stars of Tomorrow" & "2022 Guangzhou Hi-Tech High Growth Stars of Tomorrow".
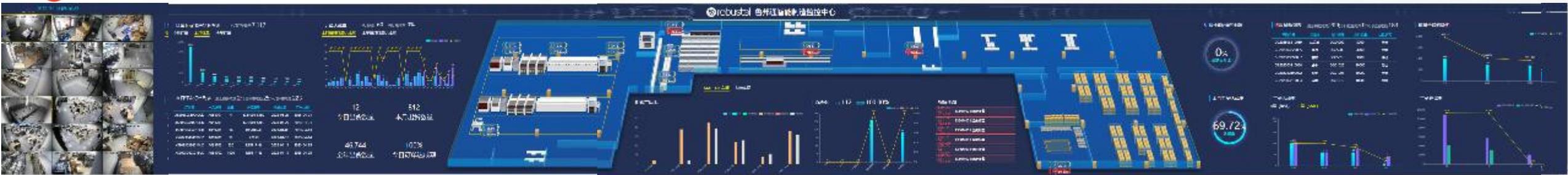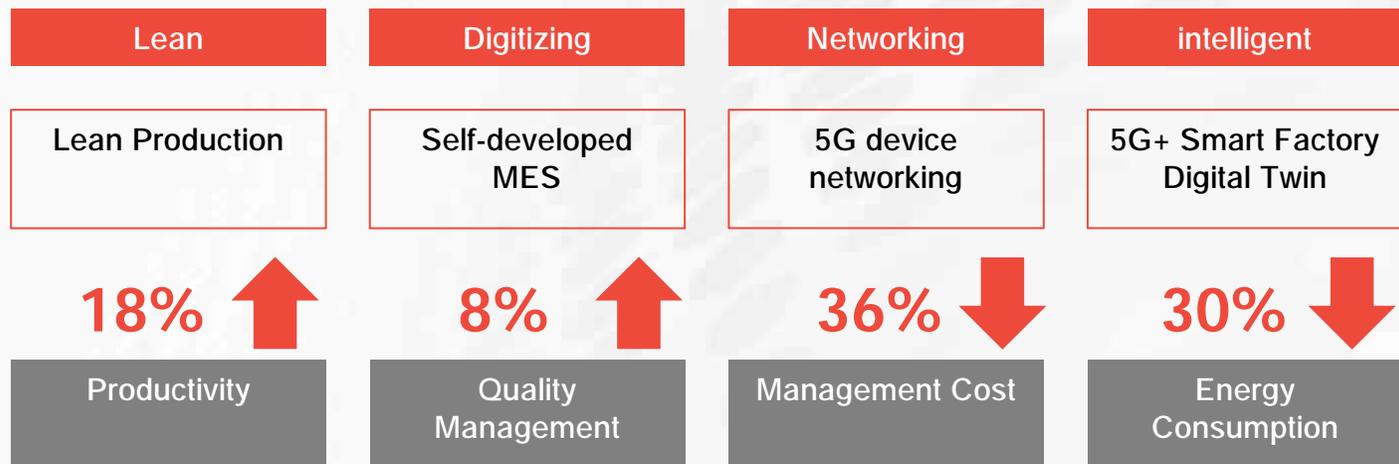
Industrial Internet Exploration

- **2016**
  - Release elevator IoT products
  - The first release of cloud + terminal IoT industry solutions
  - Annual Internet of Things Solution of the Ministry of Industry and Information Technology

- **2017**
  - National high-tech enterprise

- **2018**
  - The Ministry of Industry and Information Technology's annual industrial Internet APP excellent solution
  - Release RobustLink Cloud Platform 3.0
  - Germany Red Dot Product Design Award
  - Self -built 5G+ digital factory
  - Completed the A round of financing

Industrial IoT Connectivity

- **2010**
  - The company was established in Guangzhou

- **2011**
  - Release of the first hardware M1000

- **2013**
  - Released R3000 industrial 4G router (still on sale today)
  - Release RobustLink Cloud Platform 1.0

- **2015**
  - Established offices in Germany, Australia and Japan
  - Release RobustOS IoT communication operating system
  - Release RobustLink Cloud Platform 2.0

robustel

5G+ digital factory - improve product quality and meet customers' flexible manufacturing needs

5G+ Smart Factory Digital Twin Screen

Lean	Digitizing	Networking	intelligent
Lean Production	Self-developed MES	5G device networking	5G+ Smart Factory Digital Twin
18% ⬆	**8%** ⬆	**36%** ⬇	**30%** ⬇
Productivity	Quality Management	Management Cost	Energy Consumption

Guangzhou Development Zone Green + Enterprise

5G Smart Manufacturing Innovation Lab

QC080000: 2017

C-TPAT

ISO14001: 2015

ISO45001: 2018

ISO9001: 2015

ISO27001

Based in China - *Empowering global enterprises*

China Service Network

- Guangzhou
- Hongkong
- Dongguan
- Shanghai
- Nanjing
- Ningbo
- Suzhou

Global Service Network

- Germany
- Netherlands
- U.K.
- Spain
- Hungary
- Australia
- Malaysia
- Brazil
- Philippine
- Indonesia
- Japan

robustel

Qualification and honor

National Certification

- National specialization special new key little giant
- National High-Tech Enterprise
- Member of the "Zhuo Xin Big Data Program" of the China Information and Communications Technology Institute (CICT)

International Recognition

- German Red Dot Product Design Award
- IoT Breakthrough Award
- Utilities and Communications Awards, Global Energy News, UK

Information Security

- Nettitude penetration testing
- Passed SGS penetration test
- Pass third-party security code audit
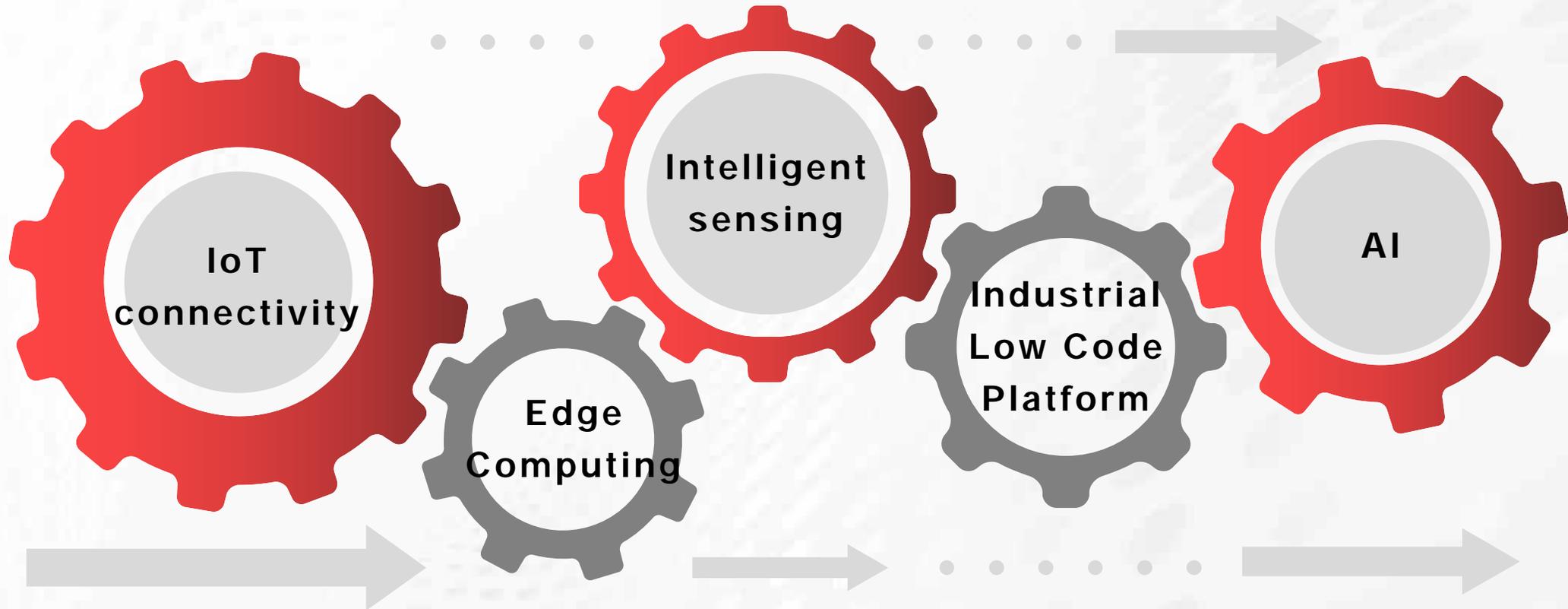
System Standard

- QC080000: 2017
- C-TPAT
- ISO14001: 2015
- ISO45001: 2018
- ISO9001: 2015
- ISO27001: 2013
- AA level of dual-chemistry integration management system

Product Strength

- MIIT Annual IoT Solution
- MIIT's Annual Industrial Internet APP Excellent Solution
- Achievement Award of Internet of Things Specialized, Specialized and New Chain Strengthening and Chain Complementing Category
- Entered the list of "Wisdom Empowering 100 Scenarios" in the National Artificial Intelligence Innovation and Application Pilot Zone

robustel

R & D strength

61

Number of invention patent
authorizations

128

Number of patent authorizations

106

Number of Computer software
registration

Typical Application Scenarios of Robustel Software and Hardware Integrated Solution

Industral 4.0

Smart Cities

Enterprise

Smart Energy

Smart Transportation

Smart Healthcare

Environmental Protection

Smart Agriculture

Utilities

Smart Retail

robustel

Robustel IoT Communication Products: *From IoT Connection to 5G+Edge Computing*

Various Product

- 5 product lines, 300+ SKUs, covering different technologies, application scenarios, and VOC from LPWAN to 5G, from lite-industrial to industrial-grade.

High-quality

- Products pass quality audits by Japan's NTT Docomo, Fujitsu, Softbank, and multiple Fortune 500 companies.

Market Validated

- Over 2 million pcs shipped worldwide to 100+ countries and regions, with product reliability validated by over 10,000 customers across various industries.

Network Security

- Products have passed rigorous penetration testing by Security Laboratory Nettitude in the UK

5G Router

EG5120-5G   R5020   R5020 Lite   R5010

Industrial Router

R3000   R3000 Quad   R3000 Lite

R2110   R2010   R2011

Lite-Industrial Router

R1500   R1510   R1511   R1520

Edge Computing Gateway

EG5101

EG5100   EG5120   EG5200

Wireless Data Terminal

M1000 MP

M1201

LoRaWAN Gateway

R3000 LG

LG5100

Elevator Voice Gateway

EV8100

Maritime Gateway

MG460

robustel

RobustOS/RobustOS Pro- self-developed gateway device operating system

RobustOS is a customized lightweight system based on the Linux kernel, which is secure and reliable, and is suitable for general IoT products such as Robustel's DTUs and routers.

RobustOS Pro is developed based on the standard Debian Linux system, with better functional extensibility, and is suitable for Robustel's edge computing gateway products.

Secure and Reliable
- Stably running for multiple years
- passing Nettitude's security penetration testing

High Flexibility
- with a modular system design that allows for on-demand development and installation of apps
- supporting over 100 different protocols

User Development
- with SDK documentation provided
- support development languages such as C/C++

200mil+
Connecting Devices

8 yr+
Running

100+
APP

100+
Countries

Product certification covers a large number of countries around the world
- enabling customer equipment to quickly achieve global deployment

Obtained a variety of product certifications, covering most countries and area in the world

RCMS, a cloud-based gateway device management platform -
enabling gateway deployment and network operation and maintenance management

Global distribution, fast and low-cost access

100+

Countries

Compatible with all Robustel gateway products

Hosted on Microsoft Azure and Alibaba Cloud

Zero-touch Provisioning（ZTP）

- Visual and flexible configuration
- Fast initialization
- Cost savings

360-degree Visualization

- Customizable data reporting
- Charts related to network and connection status
- Location tracking
- Historical data tracking

Over-the-Air（OTA）

- Firmware
- Applications
- Configuration files

Rich Control Options

- Reboot
- IO control
- PoE
- LoRaWAN
- Packet Capture
- CLI Access
- System Logs

Mature VPN Network

- Establishing a secure and reliable tunnel based on OPENVPN
- Adaptable to any brand of SIM card
- Providing an integrated client
- Flexible and Scalable

Helping the global deployment and monitoring of wind turbine gearboxes in Sweden

Challenge

- Wind turbines are difficult to install and maintain, and the maintenance costs are high. Collect data of wind power components through various sensors for preventive maintenance.
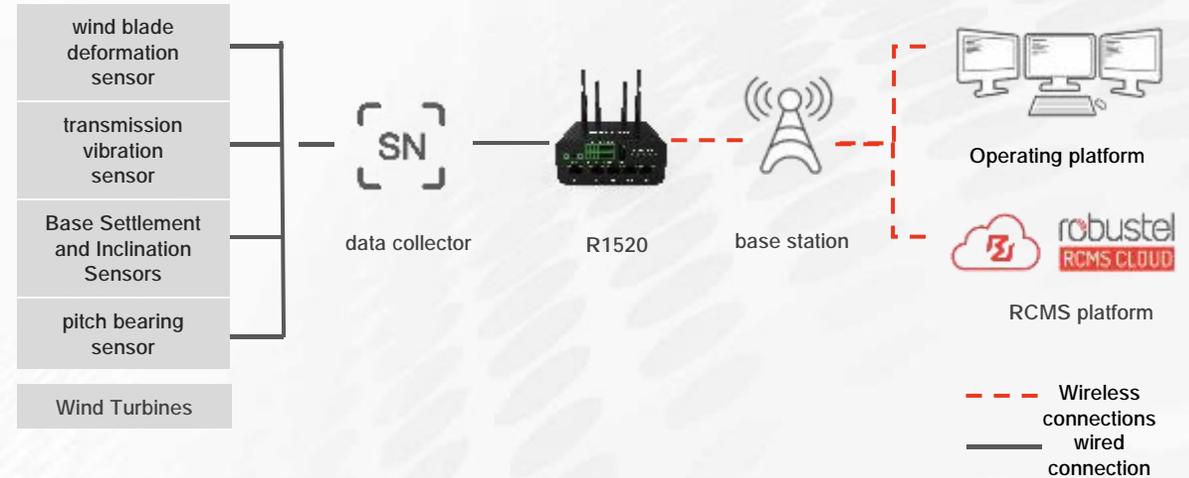- Customers deployed in different countries around the world

Application Topology

wind blade deformation sensor	
transmission vibration sensor	
Base Settlement and Inclination Sensors	
pitch bearing sensor	

Wind Turbines

data collector   R1520   base station

Operating platform

RCMS platform

- - - - Wireless connections
—— wired connection

Solution

R1520 Global of High Reliabilitl
Remote device management platform - RCMS

- Single SKU global entry
- Getting device status at any time

Benefits

1 set of wind turbine management platform

Visual operation and maintenance management

20000 +

Deploy devices globally

30%+

Operation and maintenance cost

robustel

Helping Japan mobile operators and battery manufacturers *build energy storage IoT solution*

Challenge

- The communication interface and communication protocol of each device are different
- The solar battery system needs to be connected to its cloud platform for centralized management
- Remote monitoring of smart home devices is difficult

Benefits

1 set of energy storage IoT platform

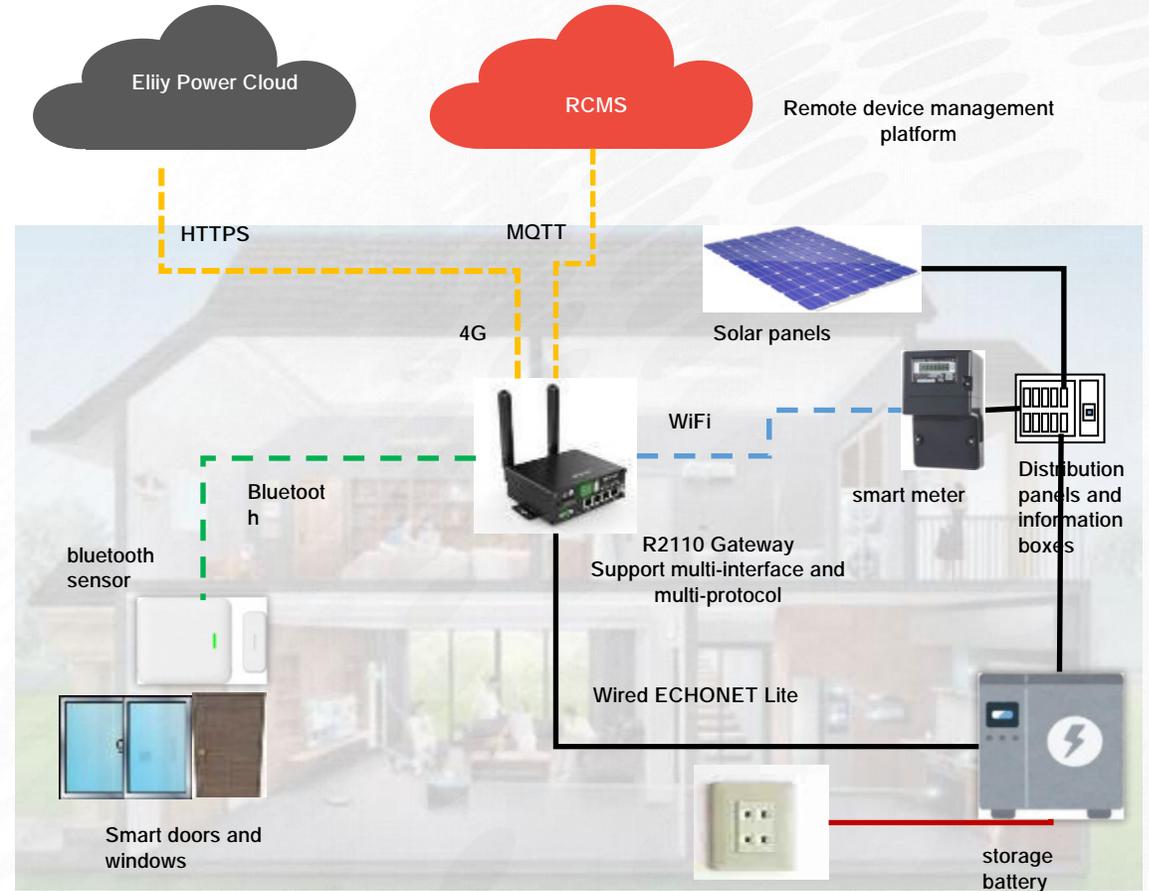Visual operation and maintenance management

50,000+
Connect Device

7,000+
Docomo branches upgraded

operation and maintenance cost

Solution

Eliiy Power Cloud

RCMS

Remote device management platform

HTTPS

MQTT

4G

Solar panels

WiFi

Bluetooth

bluetooth sensor

smart meter

Distribution panels and information boxes

R2110 Gateway
Support multi-interface and multi-protocol

Wired ECHONET Lite

Smart doors and windows

storage battery

robustel

Where are Robustel solutions deployed today?

Make Things Connected

Follow Us on LinkedIn