



SMART AMR & SETTLEMENT SYSTEM



End-To-End LoRaWAN Solution



LoRa Alliance® Member

**SUSTECH is a
LoRa Alliance
Member**

LoRa Alliance®

**Official Certification of Membership
Sustech Integrated Technologies**

The LoRa Alliance Inc. hereby certifies Sustech Integrated Technologies is in good standing of Adopter membership for the May 2023 to May 2024 term.

Debbie McGinnis

Debbie McGinnis
Account Director
LoRa Alliance, Inc.

The certification document is framed in blue and features a background image of a city skyline with glowing network lines connecting various points. The LoRa Alliance logo is prominently displayed at the top, followed by the title of the certification. Below the title is a paragraph certifying Sustech Integrated Technologies as an Adopter member in good standing for the period of May 2023 to May 2024. At the bottom, there is a signature of Debbie McGinnis, Account Director at LoRa Alliance, Inc.

AUTHORIZATION CERTIFICATE

This is to certify that
SUSTECH INTEGRATED TECHNOLOGIES

is an Authorized System Integrator of
Altus Sistemas de Automação S.A.
for the Category - End User Specialist

March 27th, 2023 - São Leopoldo, Brazil

Amant Hakouat
Anglo-Brazilian Marketing Manager

Altus Sistemas de Automação S.A.
altus@altus.com.br | www.altus.com.br



Authorization Certificate

This is to certify that
Sustech Integrated Technologies
has been appointed as an authorized
Distributor
and is approved certified partner under the terms and conditions of the
Agreement
with a validity of 2022-06-15 to 2025-06-15
to promote and sell Wellintech Products & Services
in GCC countries and Sudan market.



adeunis
Letter of Authorization

To Whom It May Concern:

The company **Sustech Integrated Technologies**
located at: Rua Antônio Rêilly, 166 - Vila Rica,
P.O. Box 7123, Abu Dhabi, United Arab Emirates
E: info@sustechme.com

is a Value Added Service and Application Provider Company for our products Adeunis IoT Products & Solutions

located at: Rua Antônio Rêilly, 166 - Vila Rica, 13920-000 Ribeirão Preto, São Paulo, Brazil

to import directly from Adeunis IoT Products & Solutions in France and sell those products in GCC & Sudan with supporting Services where applicable.

Adeunis IoT Products & Solutions and Sustech Integrated Technologies look forward to your needs, and we fully support Sustech Integrated Technologies products, catalog, technical support, services after sale and deliver warranty materials when required.

under warranty for 24 months from delivery.

satisfy and meet your requirements for future relationship.

adeunis

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Sustech Integrated Technologies Limited

is authorized as a
System Integrator

with recognized capability to engineer, develop and install solutions featuring Emerson's Industrial Automation & Control portfolio of products.

Jeff Houscholder
President
Machine Automation Solutions
Emerson

David Kraft
Vice President, Sales
Machine Automation Solutions
Emerson



Industrial Automation & Control System Integrator

ISSUE DATE: 12 SEP 2023
AGREEMENT: N000016356
EXPIRATION DATE: 10 SEP 2024
CUSTOMER SERVICE NUMBER: 69846



Object: A VAR Solution Provider

We, B METERS S.R.L., having factories in Via Prati 3, Rome

SUSTECH Integrated Technologies is a certified solution provider for our products B METERS S.R.L. products

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Object: A VAR Solution Provider

We, HAUK & SASKO, having factories in Via Prati 3, Rome

SUSTECH Integrated Technologies is a certified solution provider for our products HAUK & SASKO products

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Object: A VAR Solution Provider

We, SUSTECH, having factories in Via Prati 3, Rome

SUSTECH Integrated Technologies is a certified solution provider for our products SUSTECH products

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Manufacturer Authorization Form

To Whom It May Concern,

We, Xiamen Mileight IoT Co., Ltd., are an official manufacturer of Industrial Cellular Routers, LoRaWAN Gateways & Sensors, etc., with registered address at A999, Floor 3, Zone C, Innovation Building, Xiamen Software Park, Xiamen Torch Development Zone for High Technology Industries.

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Contract No: 02-202313
4th July, 2023

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Four-Faith Technologies

is authorized as a
System Integrator

with recognized capability to engineer, develop our-Faith Portfolio of products

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Stream Controls
Commercial Registration: 156198
Tax Card: 602-158-745
Email: info@streamcontrols.com



VAR Certificates

Why do you have to Get Started with LoRaWAN. . .

No need for a frequency license

LoRaWAN operates on a free public spectrum, available for anyone to use, LoRaWAN networks are deployed on free ISM bands (EU868) in UAE & GCC Countries allowing any service provider or enterprise to deploy and operate LoRaWAN networks without a frequency license.

Wide Coverage Range

Using CSS and ADR, LoRaWAN can communicate with a gateway up to 15 km away in unobstructed open areas or up to 5 km away in urban areas. This means that a single gateway can cover all devices in an area of approximately 700 square kilometers.

Low Power Consumption

Compared to 4G , LoRaWAN boasts ultra-low power consumption, whereas 4G lacks low power features. In outdoor settings such as agriculture and forestry, 4G cannot be battery-powered like LoRaWAN.

Low Cost

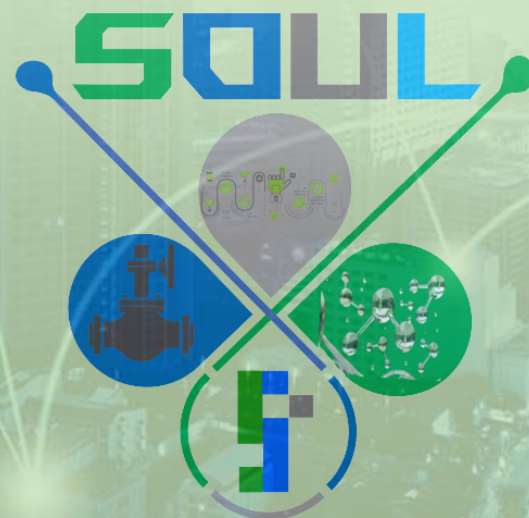
In LoRaWAN, the devices that are usually in greater quantity are the gateways and terminals. Since the gateway only serves as a data forwarder, its price is relatively cost-effective.

Strong Penetration Capability

LoRa wireless modulation technology can penetrate indoor depths, with the ability to reach underground water and gas meter sensors.

SUSTECH ...have the...

SMARTER OPERATION UTILIZING LORAWAN





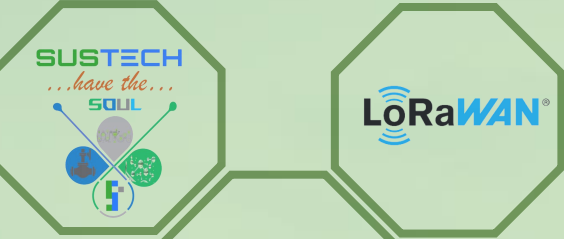
- Smarter landscaping and irrigation
- Smarter water network monitoring
- Smarter water quality
- Smarter air quality
- Smarter metering with **Billing System**
- Smarter street lighting



What is AMR

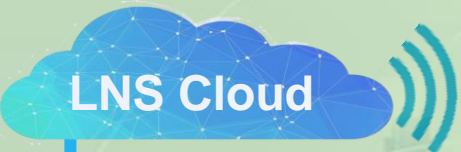


SUSTECH AMR is an integrated system Based on LoRaWAN technology connectivity and settlement system. This enables Automatic communication of data between the Smart Meters and the Billing system as well IIOT Platform. The analytics on data available can be used for billing the customers on the actual usage of the thermal energy and to identify opportunities for energy savings and optimization.



AMR

SMART AUTOMATIC METERING READING & SETTLEMENT SYSTEMS



LoRaWAN System Connectivity Architecture



LoRaWAN®

Wireless Metering reading



Shut off valves

LoRa LoRa



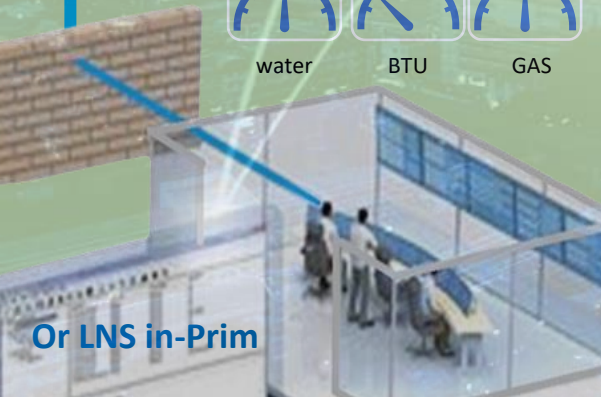
Electric



Irrigation



Or LNS in-Prim



SMART WATER & ELECTRICAL AMR SYSTEM COMPONENT

- Domestic water and electrical meters fitted at the point where the enters the building or Flat.
- Standalone, smart remote solenoid Valve for water or electrical switch for electricity for command to open/close.
- Remote communications LoRa with the operations center for centralized monitoring and management.
- Software components running on servers at the Operations Center and peripherals.

CLOUD
METERING



System Component



SMART WATER METERING



SMART metering with Remote Valve-Control



SUSTECH SMART metering with Remote Valve-Control offers the client a good solution for financial advantage. A meter embedded with a ball valve (residential) or Butterfly valve enables the water authority department to control the valve remotely once the client cannot take good control of water users. With this solution, the utility's financial situation will be enhanced significantly.

SUSTECH



LoRaWAN®

BTU
METERING

SUSTECH SMART BTU METERS

SUSTECH
INTEGRATED TECHNOLOGIES

LoRa Alliance® Member

BTU Meters are used for thermal energy consumption metering. SUSTECH BTU Meters are linked to its Gateway for sending the meter readings. Our Metering solutions are completely wireless avoiding any hassles related with wiring issues. Our Thermal Energy solutions can be integrated with our software MBS offering complete billing and monitoring solutions. For BTU Meters we support LoRaWAN Technologies. The meter reading data is secured through data encryption technologies. The Metering system can be integrated with our MBR and the client can roll out their billing and monitoring system with very less time.

Billing and settlement



SMART BTU AMR SYSTEM COMPONENT



System Component



- Domestic or commercial BTU meters fitted near the cooling unit or at the point where the cooling medium enters the building or Flat.
- Standalone, smart remote shut-off valves with electric motors can open and close remotely
- Remote communications LoRa with the operations center for centralized monitoring and management.
- Software components running on servers at the Operations Center and peripherals.

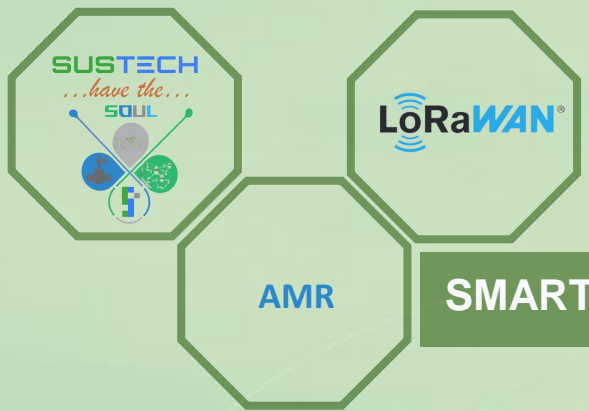
GAS AMR SYSTEM COMPONENT



System Component



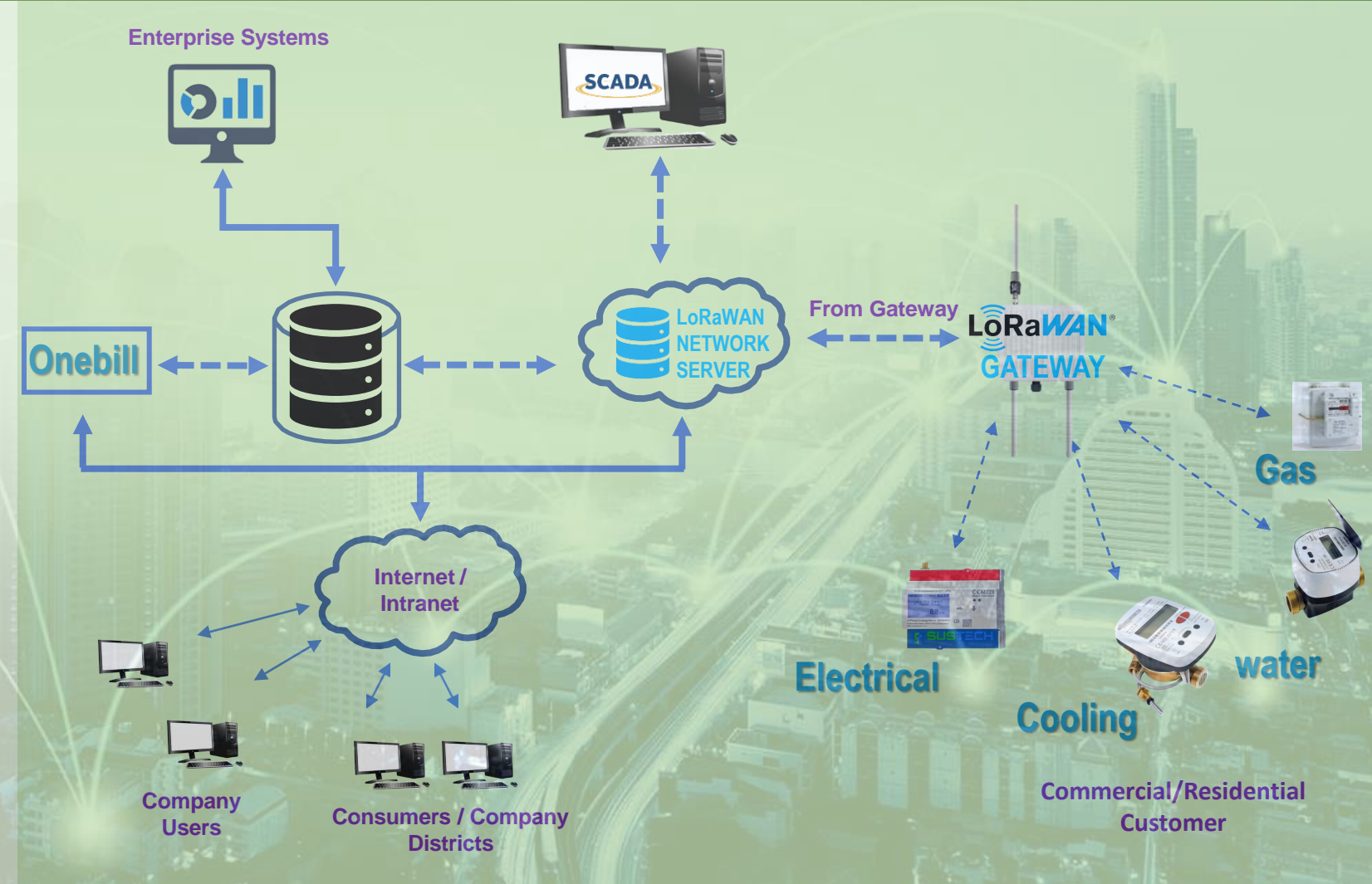
- Domestic or commercial diaphragm meters fitted with a microelectronic smart pressure sensor.
- Standalone, smart remote shut-off valves with electric motor, and gearbox.
- Magnet-proof optical sensors for volume detection for mechanical encoders.
- Remote communications LoRa with the operations center for centralized monitoring and management.
- Software components running on servers at the Operations Center and peripherals.



SMART METERING SYSTEM ARCHITECTURE / INFORMATION FLOW



AMR System



- Integrated smart metering solution for independent power/water producers
- Settlement systems for power purchase agreements (PPA) and water purchase agreements (WPA)
- Automated billing and invoice verification
- Consulting, support & maintenance

PASS BENEFITS AND ADVANTAGES

- Management system for the most important process in commercial plant operation: invoicing and settlement
- Integrated database solution for plant and back-office teams
- Strong reporting capability, high transparency delivered
- Acquisition of production and consumption meter data from digital control systems (DCS)
- Database for plant availability and capacity, load scheduling, and outage events
- Automatic calculation of invoices for electricity and water as per the contract clauses of PPA and WPA
- Generation of invoices and notices
- Comprehensive reporting
- Optional -Invoice verification for inputs: natural gas, fuel oil, coal, additives
- Optional -Fuel efficiency calculations / Fuel Demand Model



The Value Added





- Main Office in Masdar – UAE
- Abu Dhabi Office - UAE
- Backoffice support – Manila
- Backoffice support – Jordan

Abu Dhabi Office | Office 101, gate 3, Rabdan Mall, Abu Dhabi
Masdar Office | Accelerator Building, Masdar, Abu Dhabi

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United Arab Emirates