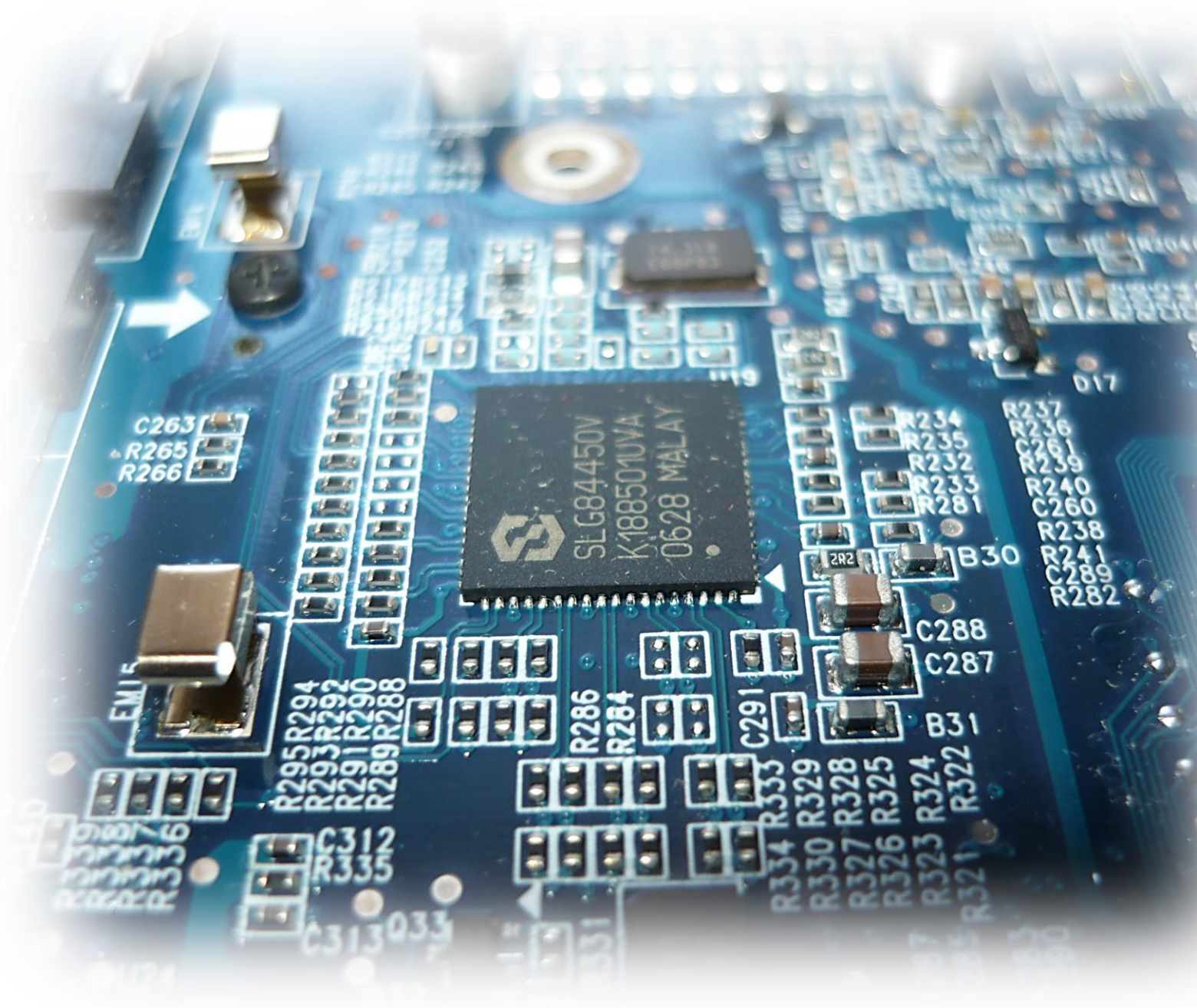
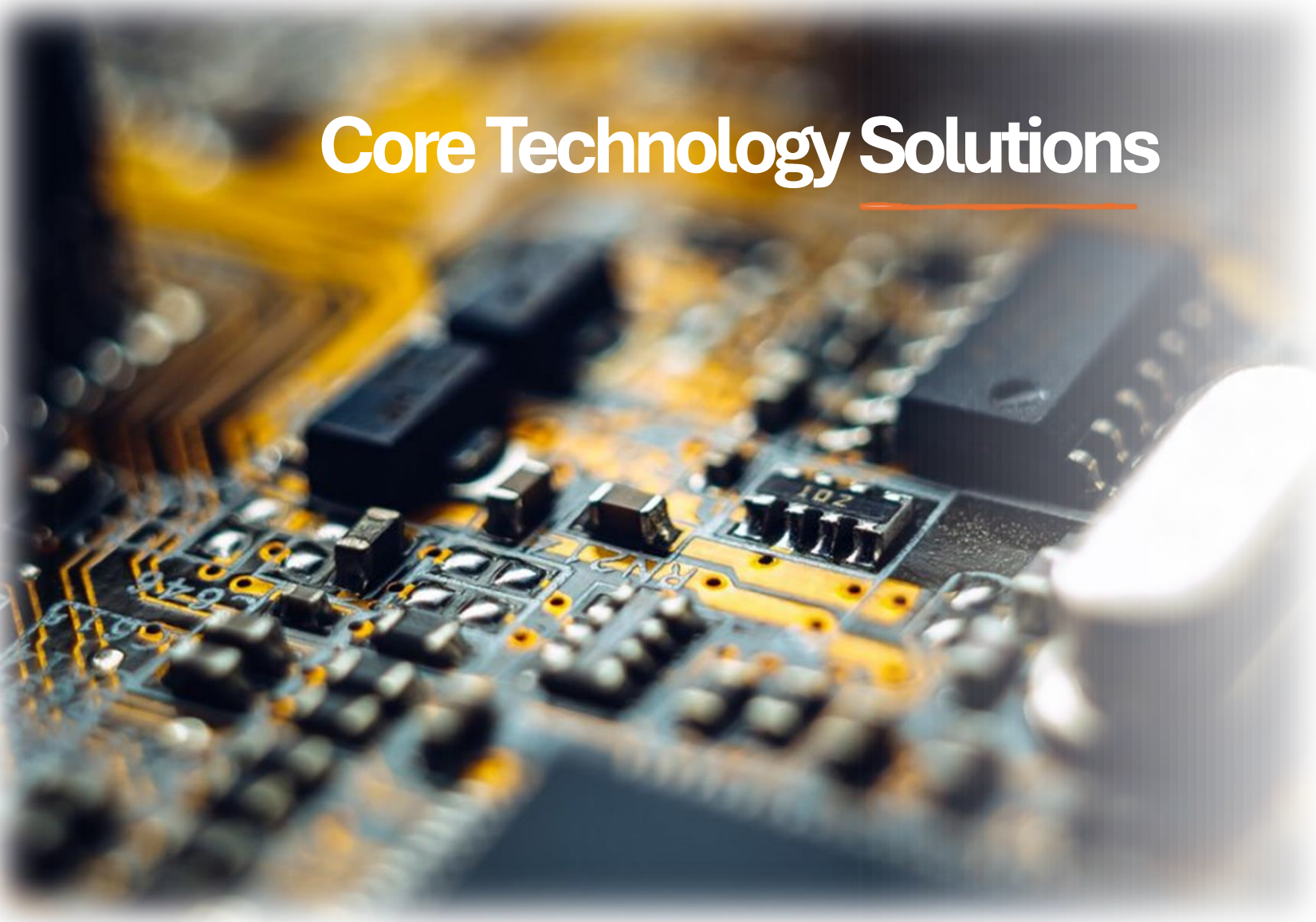
BAUSCH datacom

Technology Portfolio:

Empowering the Energy Transition with
Smart Data-driven Connectivity.



Core Technology Solutions



EV charging electronics and software for charging infrastructure, including eRTU 2-7 series, eWall Boxes, and Public Chargers with Load Balancing capabilities

Metering Gateways and Modems for industrial (56-110 kVA) and residential invoicing applications,

IoT loggers for (real-time) data acquisition and remote monitoring of energy assets and consumption sensors

Remote Terminal Units (RTU's) for MV-LV substations (10-36 kV / 400-230 V), enabling (real-time) data acquisition and remote monitoring

Energy Gateways and sensors for decentralized production systems, with integrated trust anchors for energy tokenization and sharing

Device Management System – DEMAS - Configuration, Management and Asset system

From Open-Source Linux and C, C++ to customer dedicated Hardware solutions...

SERVICES

Energy Infrastructure Management

Green Certificates Authentication

Solar Infrastructure Management & Improvement

Grid infrastructure- and network

Energy Tokenization

PRODUCTS

EV Charging Electronics & Software

Metering Gateways & Modems

Remote Terminal Units

Energy Gateways, Loggers & Sensors

Management Systems

RESEARCH & DEVELOPMENT

Q7/OSM Platform
Embedded Linux, Yocto

DEMAS – Device Management System
Linux – Container - Docker

API

Customer Back Office

M4/M33 Platform
Embedded C, C++

Delta Platform
Embedded C, C++

Trust Platform Module
Crypto Anchoring

CE
RED
IEC 62443
NIS2
ISO 9001:2015
ISO 27001

Hardware-Software portfolio

DEMAS
Device Management System

Back Office DSO
Assets

SCADA IEC60870-5-104
Master

IoT MQTT
Device Broker System

DLMS Back Office

DinBox RTU Q7 /OSM
RTU

DinBox GSM M4/M33
RTU - MODEM

DL2
LOGGER LoRa

DL5
LOGGER 4G

InduBox GSM M4/M33
MODEM

InduBox PSTN III
MODEM

DinBox RTU SL+
RTU

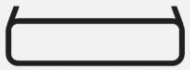
DinBox RTU M4/M33
RTU

DL4
LOGGER 4G Solar

DinBox PSTN 485
MODEM

SM_H2_3V3
SOCKET MODEM

DinBox PQ
POWER ANALYZER (Q4 2026)



DinBox RTU IO
REMOTE IO (Q2 2025)

DEMAS – Device Management System

Configuration & Upgrade Tool
DEMAS is a modular system designed for easy integration with existing management platforms, in your own private cloud - or hosted hybrid cloud environments - and complies to the highest cyber security standards.

Monitoring
In addition to its management capabilities, the DEMAS system includes monitoring functionalities that can be accessed through the open-source application Grafana.

Devices
The tool is primarily designed for the M4 and Q7 platforms but is also compatible with EDGE platforms—such as modems or RTUs—from third-party manufacturers.

File Management Concept
Configuration and management are based on a file-driven concept. Firmware, containers, and configurations are created using file uploads and plugin mechanisms, then uploaded to the DEMAS system.

API
The system can be easily integrated into existing back-office environments through APIs.

Open Source
The software is built on an open-source Linux system using Docker. Configuration is managed through Node-Red.

Automatic Commissioning
Optionally, an automatic commissioning SW & HW tool can generate over 500 RTU's ready to install, without any handling in the substations (only cabling connection).

Q7/SL+/OSM – RTU's

(SCADA) Protocolling
DB RTU Q7, SL+, OSM family offer IEC 60870-5-104, IEC 61850, Modbus RTU & TCP, MQTT … protocolling

Security – Trust Platform Module
The devices are engineered and manufactured in accordance with ISO 27001, NIS2, and IEC 62443 procedures and certifications. They support a full range of security protocols, including VPN, IPsec, TLS 2.0, and more. Additionally, the gateways are equipped with a TPM (Trusted Platform Module), enabling enhanced cryptographic anchoring.

Option boards & I/O
The RTUs feature integrated fixed inputs and outputs, can be equipped with optional application-specific boards, or connect to remote I/O via Modbus TCP or Modbus RTU.

Certifications
The Q7/OSM RTU portfolio is tested and certified by accredited laboratories for IEC 62443 cybersecurity, as well as EMC, CE, and RED compliance.

Mobile Communication
The gateways are equipped with integrated communication modules for 2G, 3G, 4G, 5G, EDGE …

Industrial
Both, AC wide range power supply (85V-265V) as DC (12-36Vdc) powering is possible. Industry environmental specifications and DINrail enclosures are present.

Q7/OSM – Option Boards

Option Boards
the DB RTU Q7 and DB RTU OSM (2026) family offers internal option boards. These exists for several functionality features. They can be also designed tailor made following the customer wishes.

Wireless crypto Anchor Board
This board is based on a Sillicon Labs chip and Wirepas Bluetooth chip. It allows receiving data coming from sensors which are integrated in solar panels, battery management systems and other energy production or storage devices. The data can subsequently be crypto anchored to offer a ‘stamp’ or ‘passport’ for tokenization applications. The crypto-anchored data can be sent by the gateway using MQTT to MQTT brokers. The Wirepas system, using meshed Bluetooth allows backup of sensor data to different gateways.

I/O Option Board
This RTU option board proposes integrated fixed inputs and outputs. The standard option board offers 8 digital Inputs (designed for 12-24V) with LED status indicator, 4x analog input (for 0-20mA) isolated differential or for each channel per Jumper to central ground. Optonal: DS2482-100 I^2C to Onewire for Voltage measurement or up to 16 digital temperature sensors

Products

M4/M33 – RTU’s

(SCADA) Protocolling
DB RTU M4, DB GSM M4 offer IEC 60870-5-104, Modbus RTU & TCP, MQTT … protocolling

Security – Trust Platform Modules
The devices are engineered and manufactured in compliance with ISO 9001:2015 procedures and certifications. They support TLS 2.0 and VPN IPsec protocols and are equipped with TPM chips for enhanced security.

I/O
The RTU’s have either integrated fixed inputs and outputs (8DI, 2DO, 2AI), or are only IEC 60870-5-104/Modbus converters with communication onboard

Certifications
The M4/M33 RTU portfolio is tested and certified by accredited laboratories for IEC 62443 cybersecurity (2026), as well as EMC, CE, and RED compliance.

Mobile Communication
The gateways are equipped with integrated communication modules for 3G, 4G, 5G, EDGE …

Industrial
Both wide-range AC power supply (85–265V) and DC power input (12–36VDC) are supported. The devices meet industrial environmental specifications and come in DIN rail–mountable enclosures.

M4/M33 Industrial Modems (Routers)

InduBox GSM M4 – END0012
Ruggedized 4G modem (LTE Cat. 1 or Cat. M1) featuring RS-485 and Ethernet interfaces, with an AC power supply (220–240V). The modem can also function as a TCP/IP router. Meter brands such as iTron, Iskraemeco, and others utilize InduBox modems for their Commercial & Industrial (C&I) meters.

DinBox GSM M4 – END0028
Pocket-sized 4G modem with RS-485 interface and 12-36Vdc power supply. The modem can act as modem, router or even RTU for Modbus/IEC 60870-5-104 conversion.

DinBox Router 4G – END0079
Pocket-sized 4G (LTE Cat. 1) router With 1 or 2 Ethernet ports, RS-485 Port, VPN IPsec, DINrail metal enclosure

Products

Products

PSTN Modems

DINrail
DB PSTN 485 is a pocket -sized DINrail modem engineered for typical PSTN switched circuit applications including Leased Line. Common interfacing is done through RS-485. DC powered (12-36V)

Industrial
The InduBox devices — specifically the InduBox PSTN III — are designed and manufactured for reliable communication with electricity meters, primarily serving the Commercial and Industrial (C&I) market.

Rack Modems
Bausch Datacom still offers 19'' rack-systems with both PSTN and GSM connectivity (CSD data)

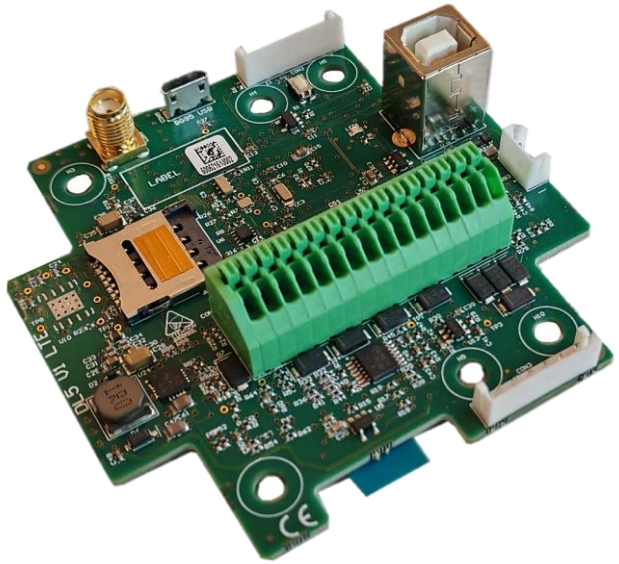
Desktop
The Proxima desktop range is based on V.92 technology and is suitable for a wide range of IT applications.

4G & LoRa SDI 12 Loggers

DL2 (LoRa)
The DL 2 device is a LoRa based device that typically captures SDI 12 data from (water) sensors, or analog values pulses. WAN communication is governed by IoT MQTT protocol

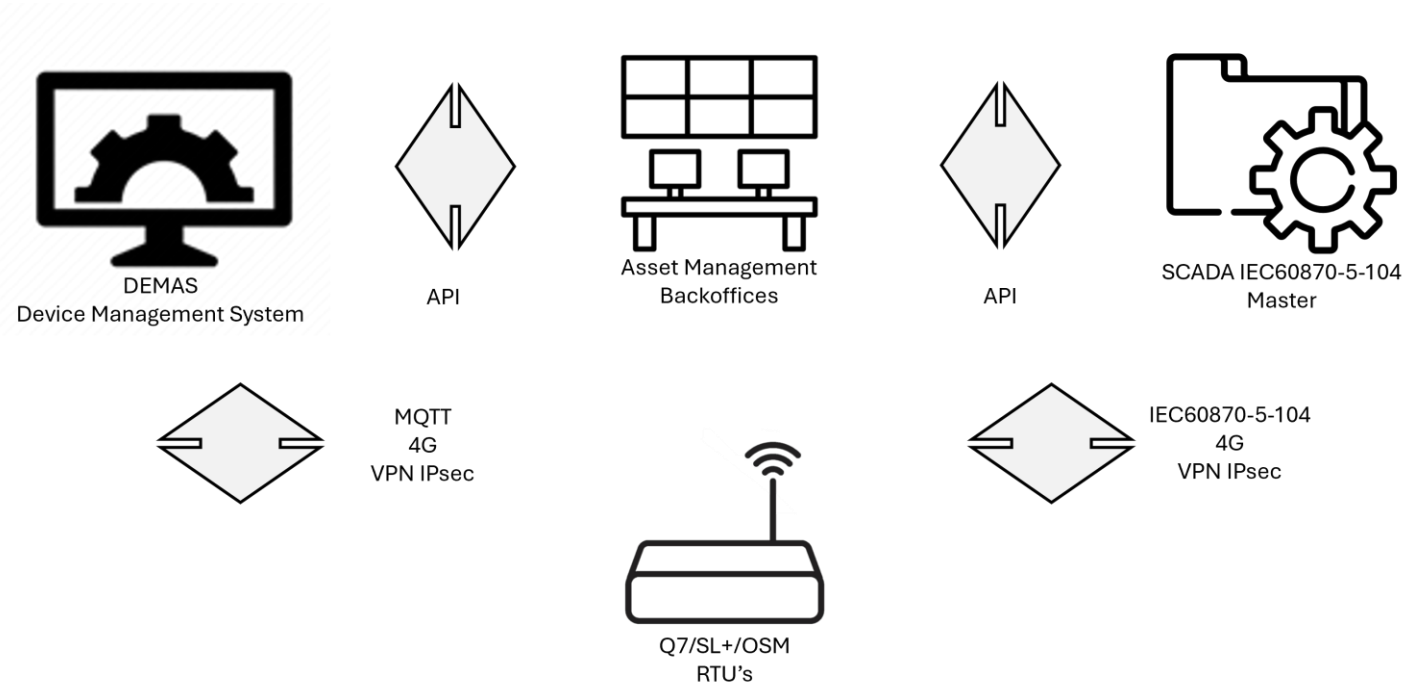
DL4 (LTE Solar)
The DL 4 device is a 4G based device that typically captures SDI 12 data from (water) sensors, or analog values or pulses. It has a rechargeable battery system powered by an integrated solar panel .WAN communication is governed by IoT MQTT protocol

DL5 (LTE)
The DL 5 is Bausch Datacom's standard 4G data logger, designed to capture SDI-12 data from water and environmental sensors, as well as analog signals or pulse inputs. WAN communication is managed via the IoT-friendly MQTT protocol.
The logger is typically delivered in a PCB form factor but is also available in an enclosed version. Bausch Datacom offers battery consumption simulation, as well as setup and configuration services.

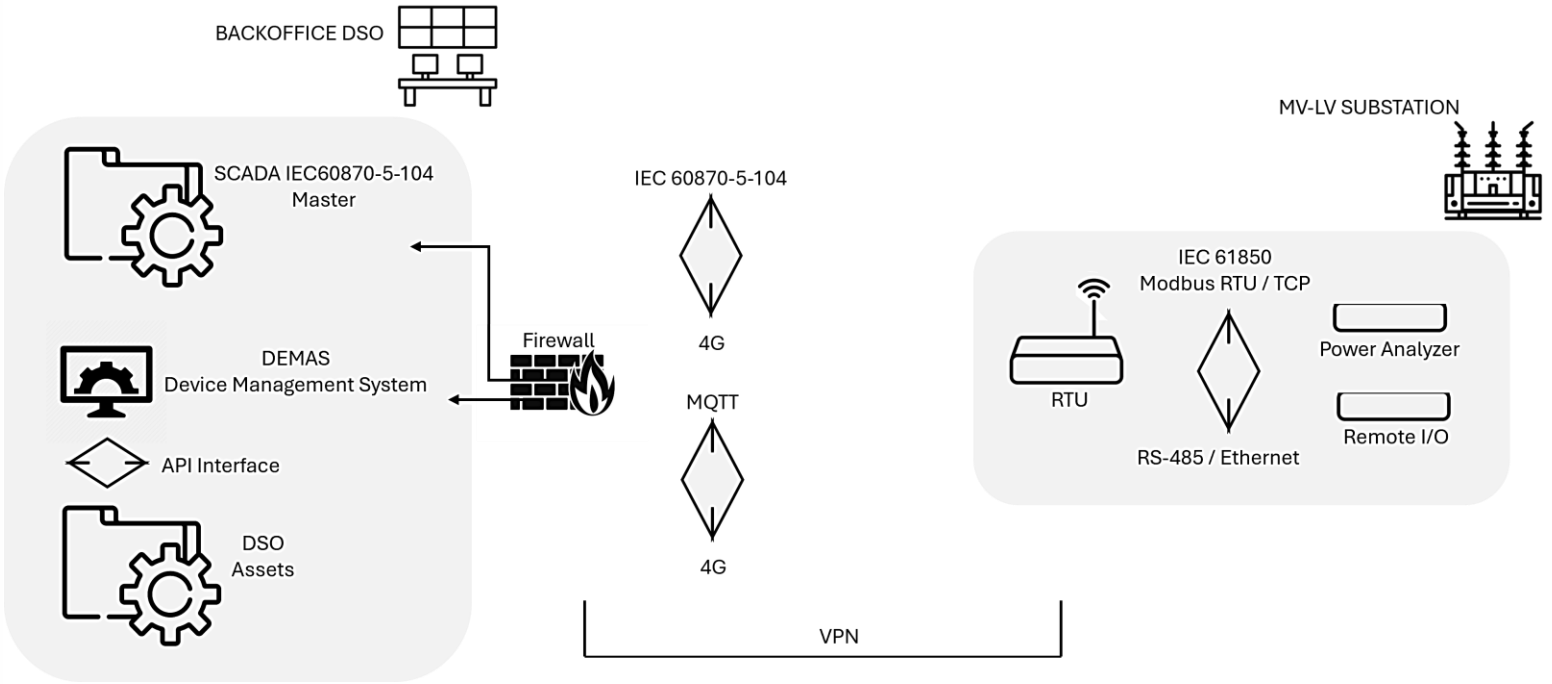


Products

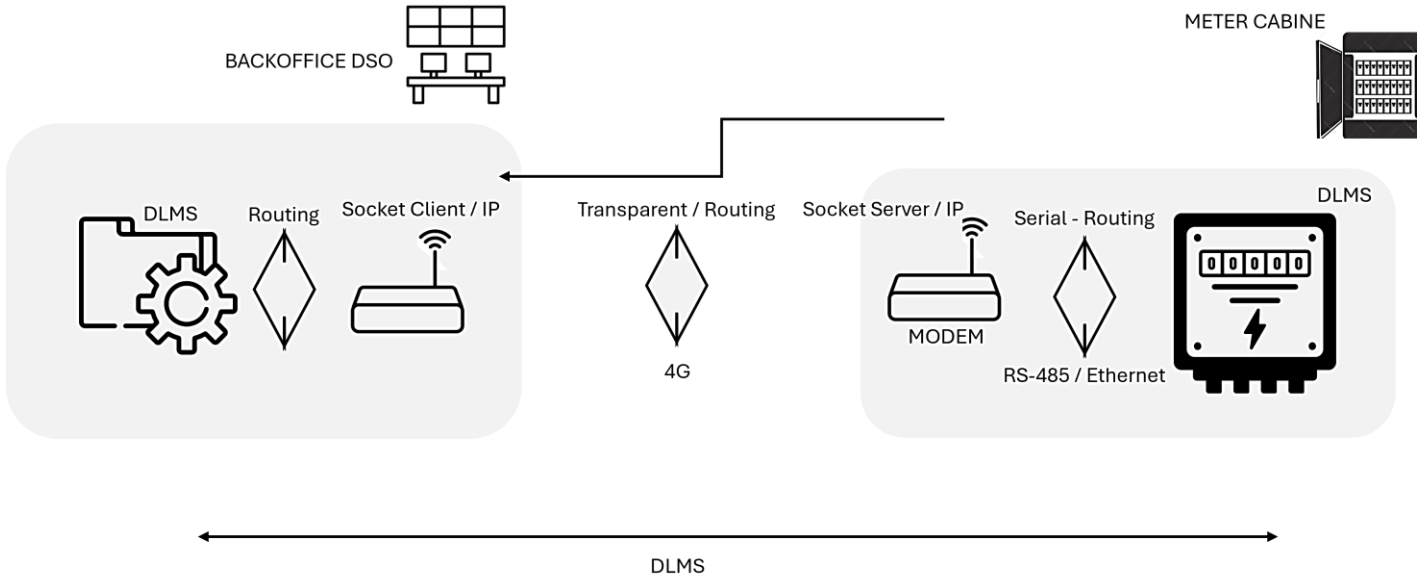
DEMAS Management System



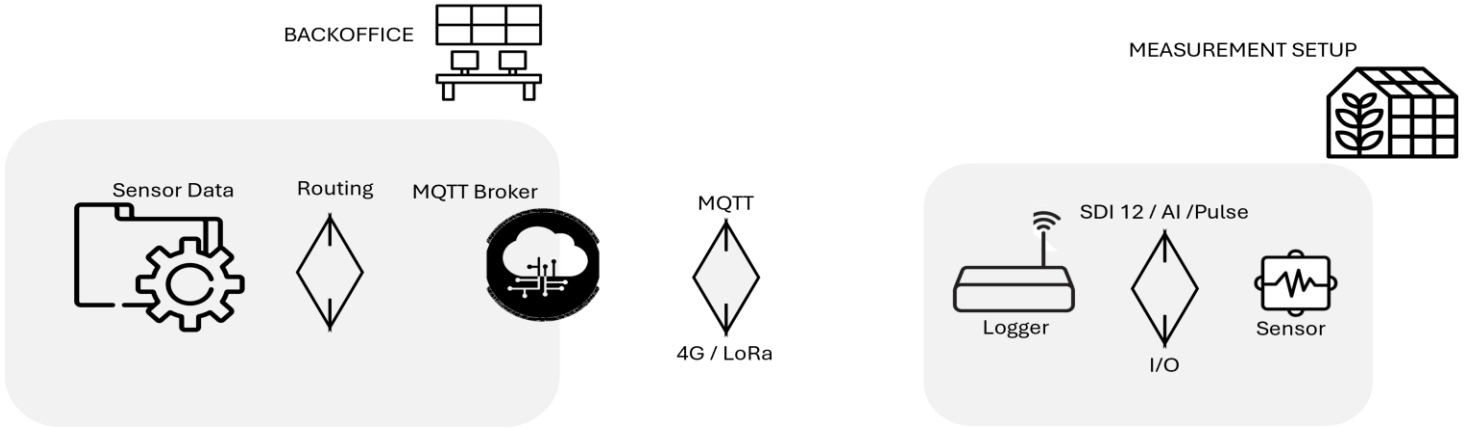
Modbus (or 61850) over IEC 60870-5-104 to SCADA (Backoffice)



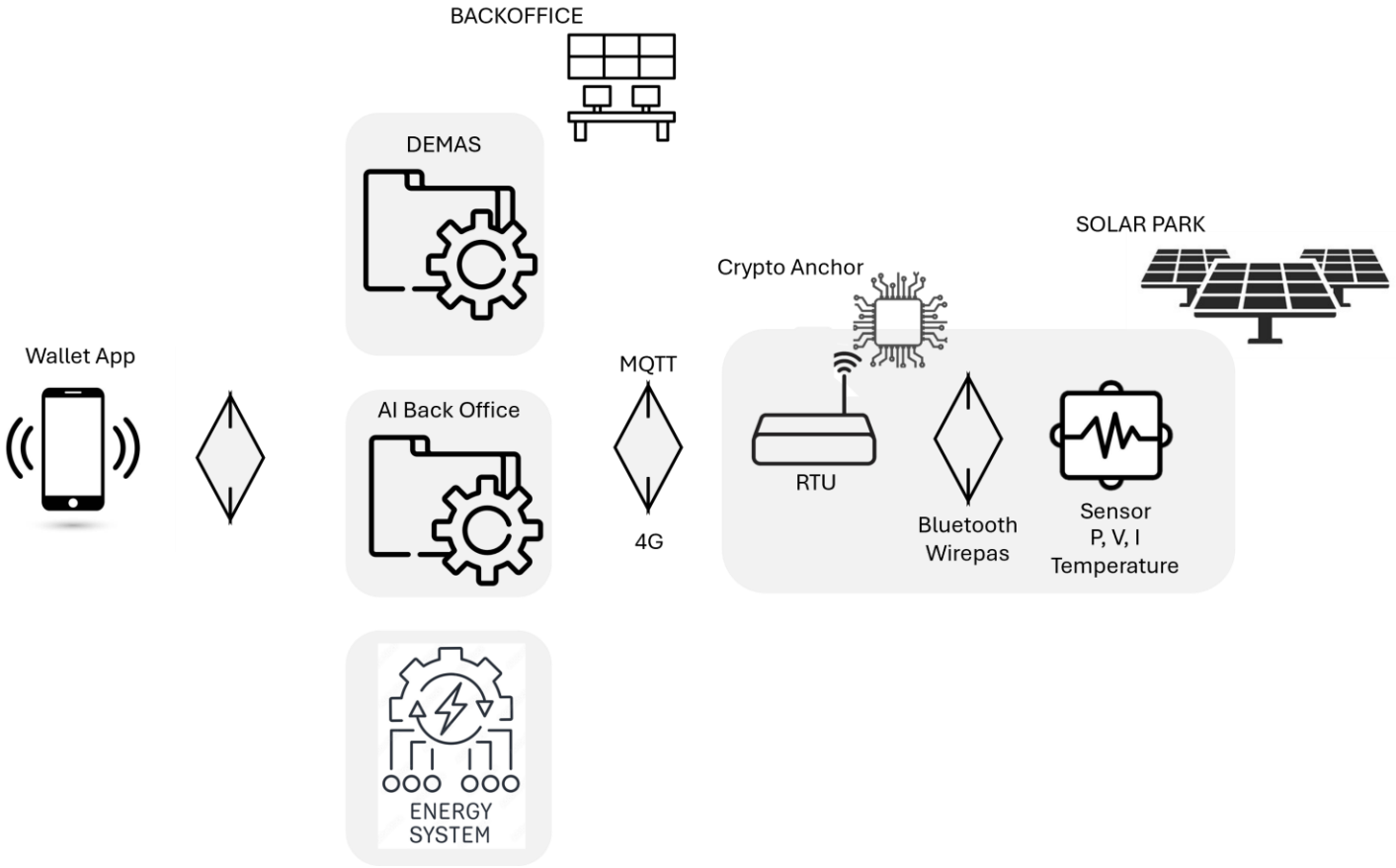
Transparent 4G communication enabling DLMS from Meter to Backoffice

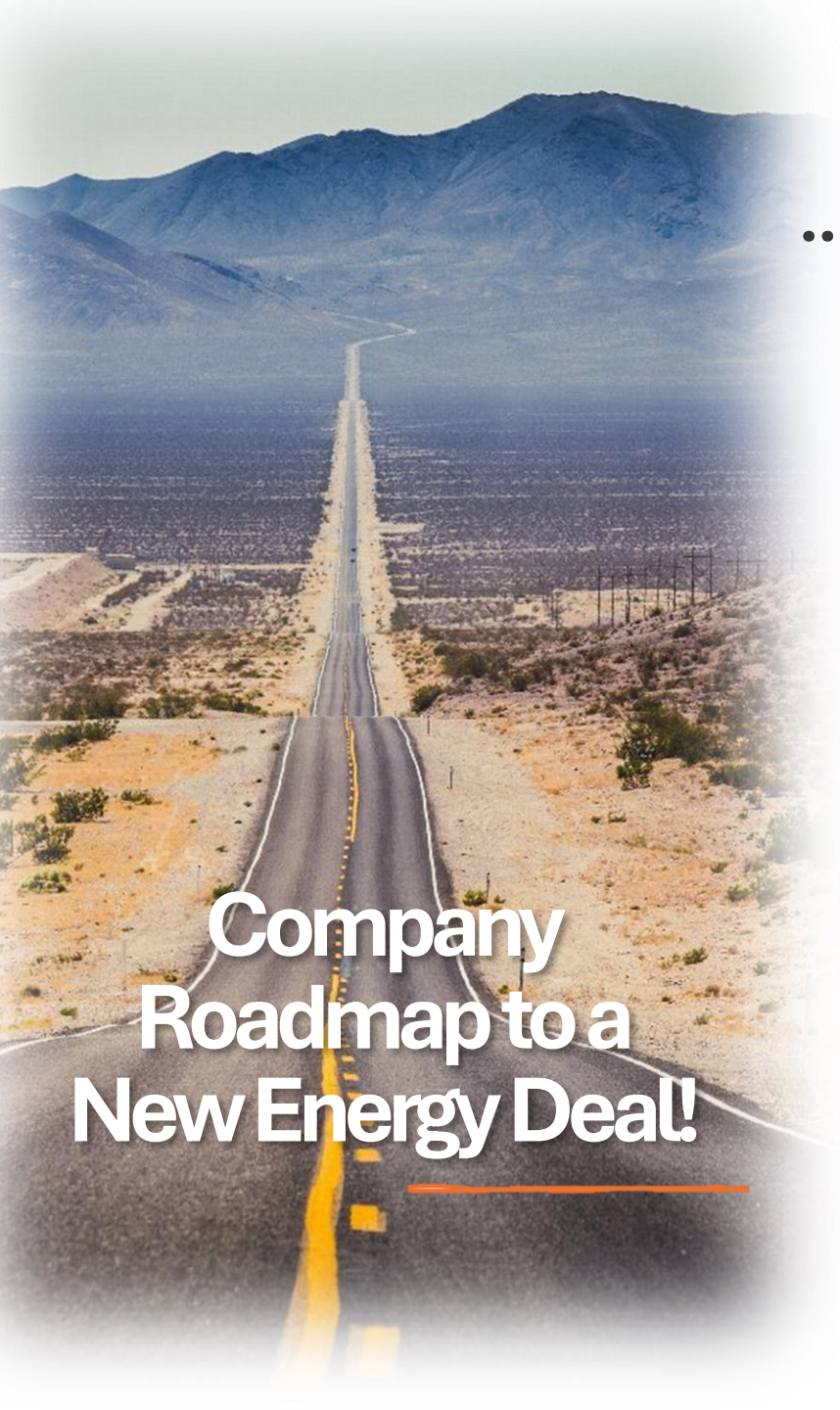


Logging SDI 12 sensor data and sending to MQTT broker over 4G or LoRa



Tokenization of sensor data of decentralized green energy production – Solar, Wind ...





Company Roadmap to a New Energy Deal!

… Building Blocks of a successful Technology…

Efficient R&D
Open-Source Linux and C, C++ SW and tailor-made HW PCB design for optimal customer specifications

High End Security
Security by design based on ISO 27001 / NIS2/ IEC 62443 / ISO 9001:2015 …

Next-Gen Tech
From System on Module (SOM) to System-on-Chip development | Optimized sourcing & cost reduction

Production & Assembly
ISO 27001 Production & Assembly Hub for European Market Sales, Lab tested certifications

Tokenisation-Digitalisation of Energy
Gateways ready for tokenization by integration of crypto anchoring chips

DEMAS Management
Gateway infrastructure DEMAS management for both Bausch Datacom as 3rd party hardware. API interfacing with existing backends

Energy Solutions & Partnerships
Complete tokenization energy solutions featuring EDGE gateways, Blockchain, management and EMS systems and wallets for energy sharing, trading and performance uplift of decentralized energy hubs

Key Projects
Total Turnkey solutions for the Energy Revolution offering grid monitoring and balancing with regards to decentralized energy production

Global Growth
EU, LATAM, Asia sales expansion | Strengthened partner network

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