

Advanced Industry 4.0 & IoT Training Lab Solution





INDUSTRY 4.0 & IOT LAB KITS

Advanced Industry 4.0 & IoT Training Lab Solution is designed to assist industry and educators in quickly setting up smart innovation LAB on Internet of Things, with the intention of producing well trained candidate who will fully understand the challenges and requirements of the IoT system, from design to development and POC (Proof of Concept) to MVP (Minimum Viable Product).

FEATURES

- IoT Smart innovation labs Kits designed to support most of the university lab experiments
- IoT Smart innovation labs Kits integrates hands-on industry relevant experiences and real-world applications in IoT design, development and testing.
- Number of real time problem-based assignments can be created on IoT Smart innovation labs Kits for hands-on learning.
- Kits enables most of the modern industry drives, PLC, HMI, SCADA, IO Module, Edge computing modules and Data Loggers.
- Kits Enables as testbed for validating custom IoT program and IO.
- Kits support most of the standard industrial protocol like MODBUS RTU, MODBUS TCP, OPC UA, OPC DA, OPC HDA, OPC AE, Profinet, CAN, JSON and MQTT.
- Kits Support most of the communication media like, Wired, WiFi, Bluetooth, BLE, RF MESH, 4G / LTE and LoRA.
- Kits enabled with TAGXCAN Gateway to enable communication with PLC, SCADA, HMI, IO & computing modules. TAGXCAN Gateway Capable of communicating with multiple different Protocol.
- Kits enabled With On premise InsightsX Platform to configure & experiencing Industrial use cases.

- Kits enables as testbed for evaluating existing environment to cyber security treats.
- IoT Smart innovation labs Kit interface with many instrumentation kits, including those for Pressure, Vibration, Temperature, Humidity, Ph, GAS flow, Water flow and Energy parameter.
- Smart innovation IoT lab enables features of remote access for programming, monitoring and debugging.
- Smart innovation IoT lab kits comes with Edge computing development kits to validating the custom program & converting idea to quick POC.
- Educators and System Integrators can quickly validate their products or solutions by using IoT lab kits.





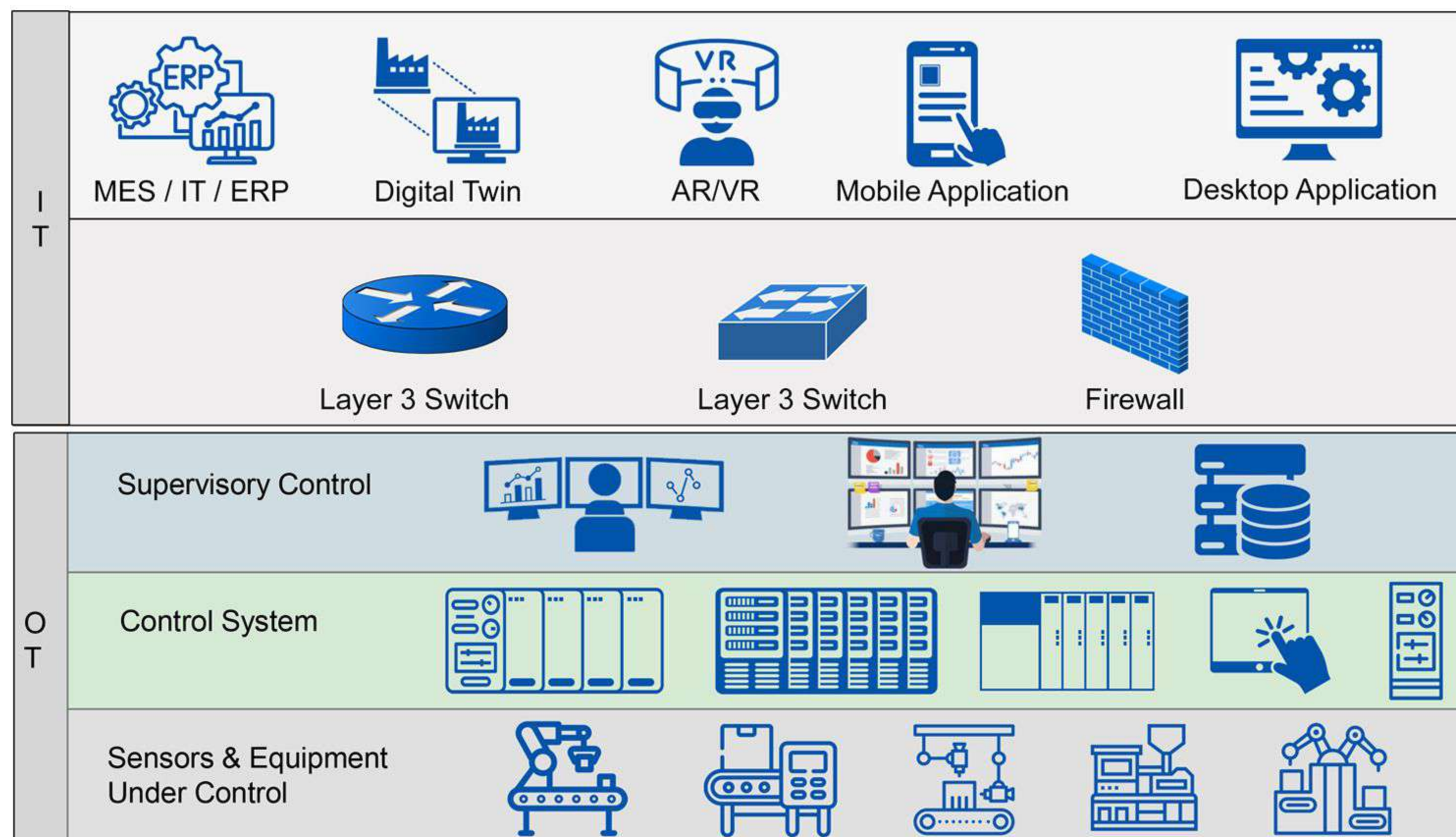
UPGRADE YOUR FACILITY WITH ADVANCED INDUSTRY 4.0 & IOT TRAINING LAB SOLUTION

- Facilities will encourage students to pursue Research & Development activities on the latest technologies IoT, Robotics & Automation, Wireless Sensor Network & Network Security.
- Vision is to enable the institution to be a front runner in imparting a deep understanding of IoT devices and systems, enabling students to take up emerging career opportunities and entrepreneurship.
- To build industry capable talent, start-up's, innovation community and entrepreneurial ecosystem for IoT.
- Enable smooth integration of IoT Curriculum to existing flow of academic operation.
- Converting Ideas into products & solutions.

ADVANCED INDUSTRY 4.0 & IOT TRAINING LAB SOLUTION SETUP KITS INCLUDES

1) Industrial IO Edge Gateway and Computing Modules

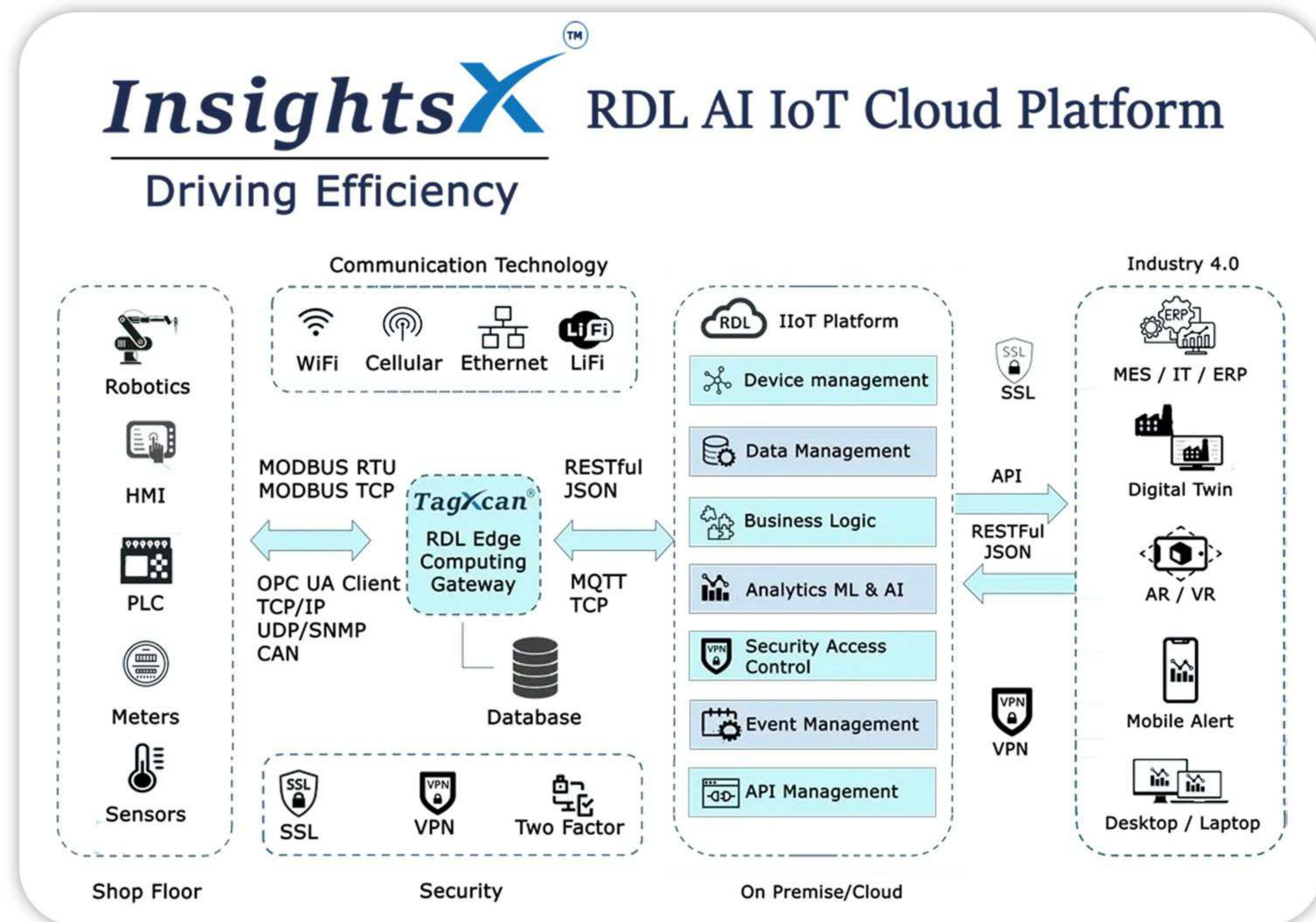
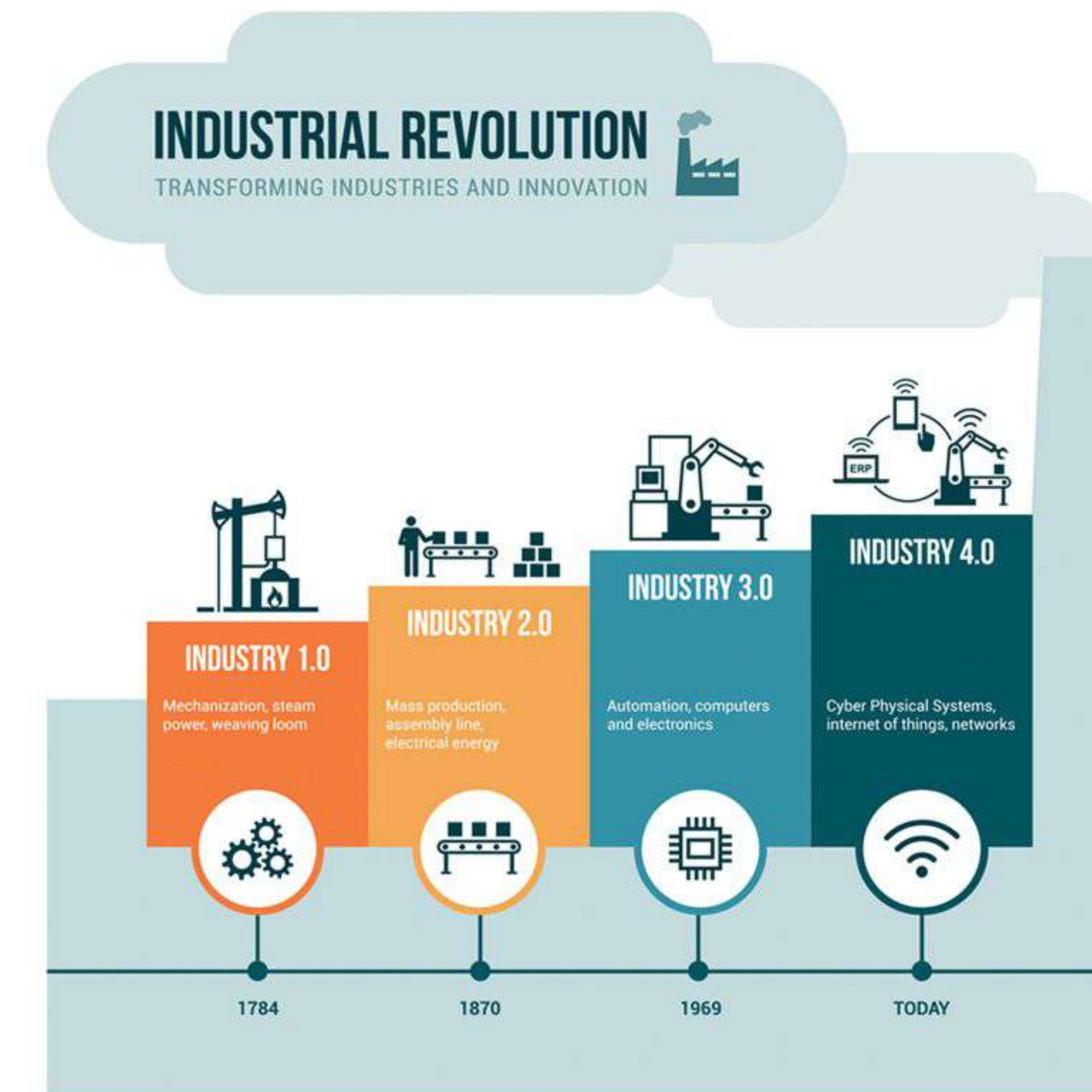
- 5x Sets of Industrial Data Logger.
- 5x Sets Industrial IO Module.
- 5x Open Source Programmable Cloud PLC.
- 1x MODBUS TCP / RTU Fingerprint Authentication System.
- 5x Panel Mount Production / Pulse Counter.
- 2x Modbus Enabled Energy Meter with CT Coil & 16 Amps Sockets.
- 2x SMPS 10 Amps.
- 1x 22 inch LCD Display.
- 1x HMI Supporting Winnc and EXOR Run Time Environment.
- 1x 3 Band Andon Light.
- 8x Digital output indicator for custom programming purpose.
- 8x Digital input for custom programming purpose.
- 16x Terminal Blocks.
- 4x 0-10V & 4-20 mA transmitter for custom programming purpose.
- 1 Set Siemens / Mitsubishi / Delta PLC's and its IO sets for custom Programming.
- 1 Set of different communication module (WiFi, Bluetooth, Lora & CAN Module).
- 2x Wi-Fi Access Point.
- 2x Relay Cards.
- 1x Taxcan Gateway.





2) Software & Utilities

- Modbus / Profinet / OPC UA / DA / AE data Acquisition system - 1 licence.
- Insightsx IoT Platform - 1 licence.
- Testing and utility software - 1 licence.
- PLC / SCADA software licence.



3) Instrumentation Sensors

- Fuel Level Sensor Kit with Tank Setup
- Oil Level Sensor Kit with Tank Setup
- Ph Level Sensor Kit with Tank Setup
- Temperature Sensor (PT100 / K / J Type) Kit
- Vibration Sensor Kit (Motor with Other Assembly)
- Gas Flow Sensor Kit
- Water Flow Sensor Kit
- Pressure Sensor Kit
- Weighing Scale Sensor
- Proximity Sensor



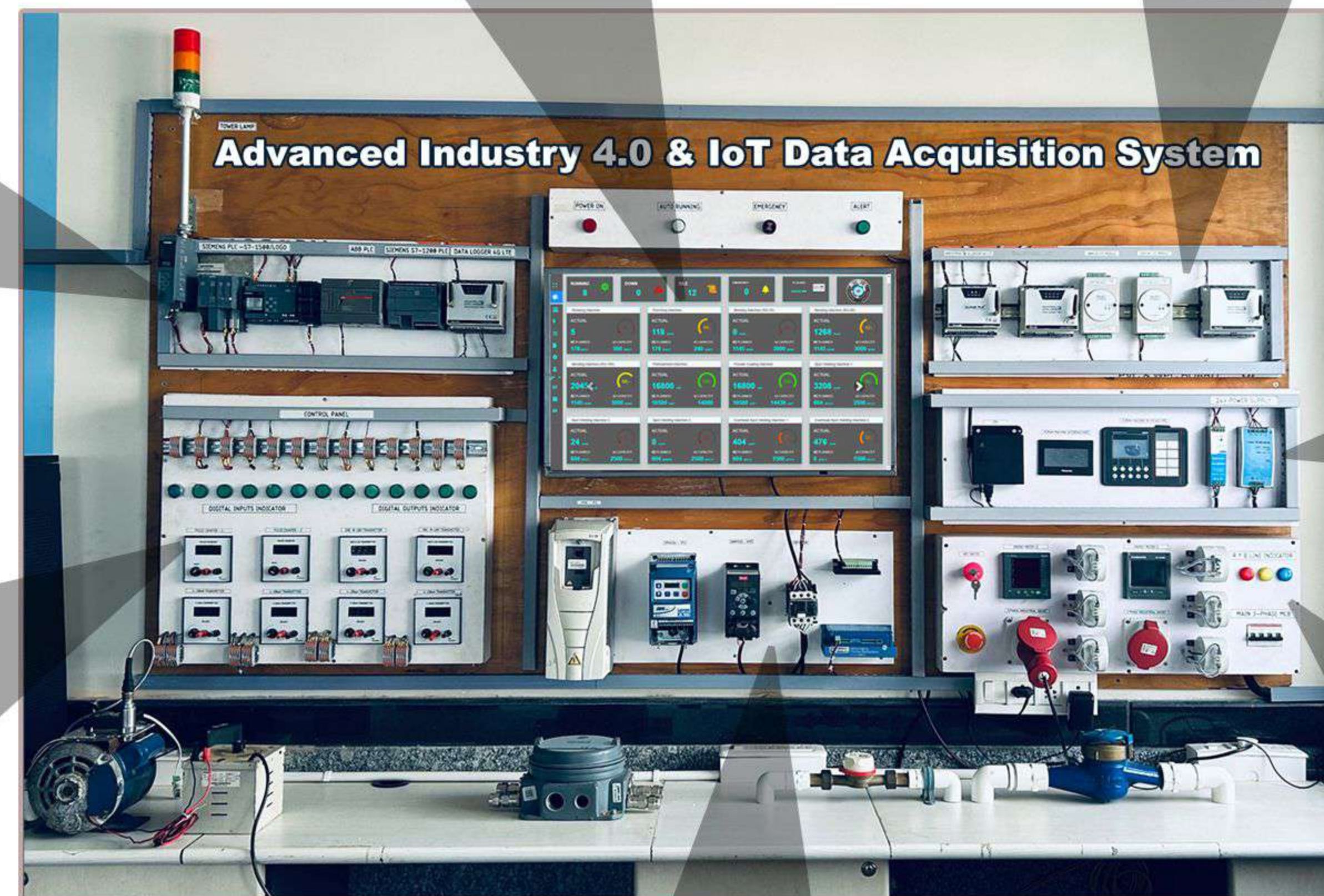
PLC Panel



LED Display



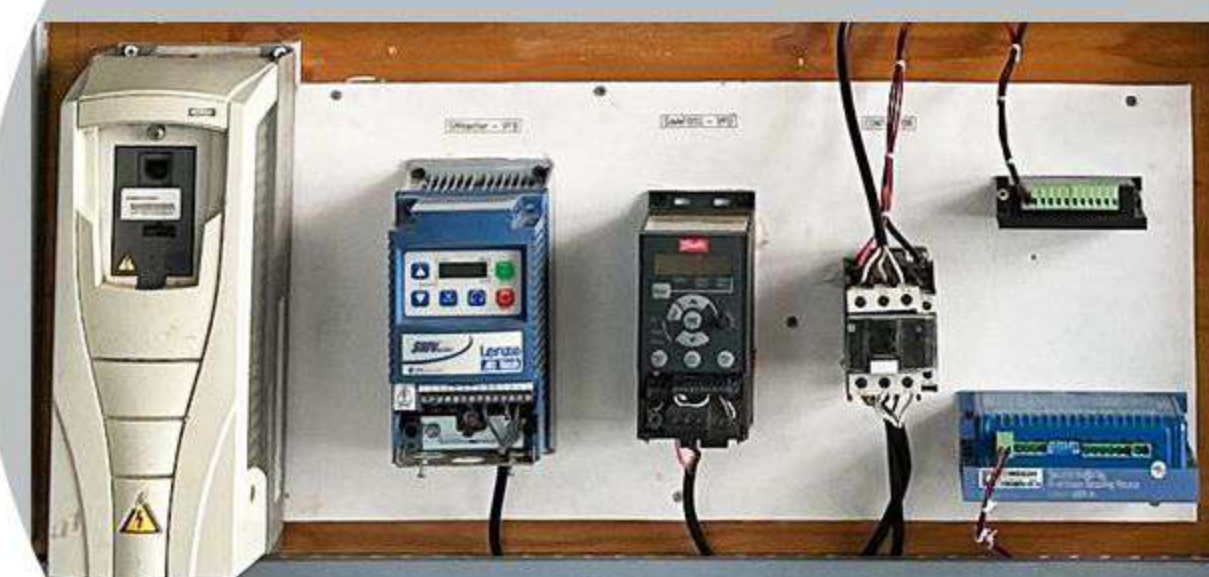
**IO & Computing
Modules Panel**



**HMI /
Power Supply**



IO Control Panel



**VFD & Steptomtor
Drives**



**3 Phase Energy Meter
with CT Coil**



IoT DEVELOPMENT KIT



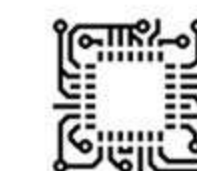
Support Upto 1000+ Experiments.



On Board / OTA Programming.



Plug & Play Interface Connectivity.



Professional EMI/RFI Complaint PCB Layout Design.



Modular Block design makes Easy access & quick Prototyping.

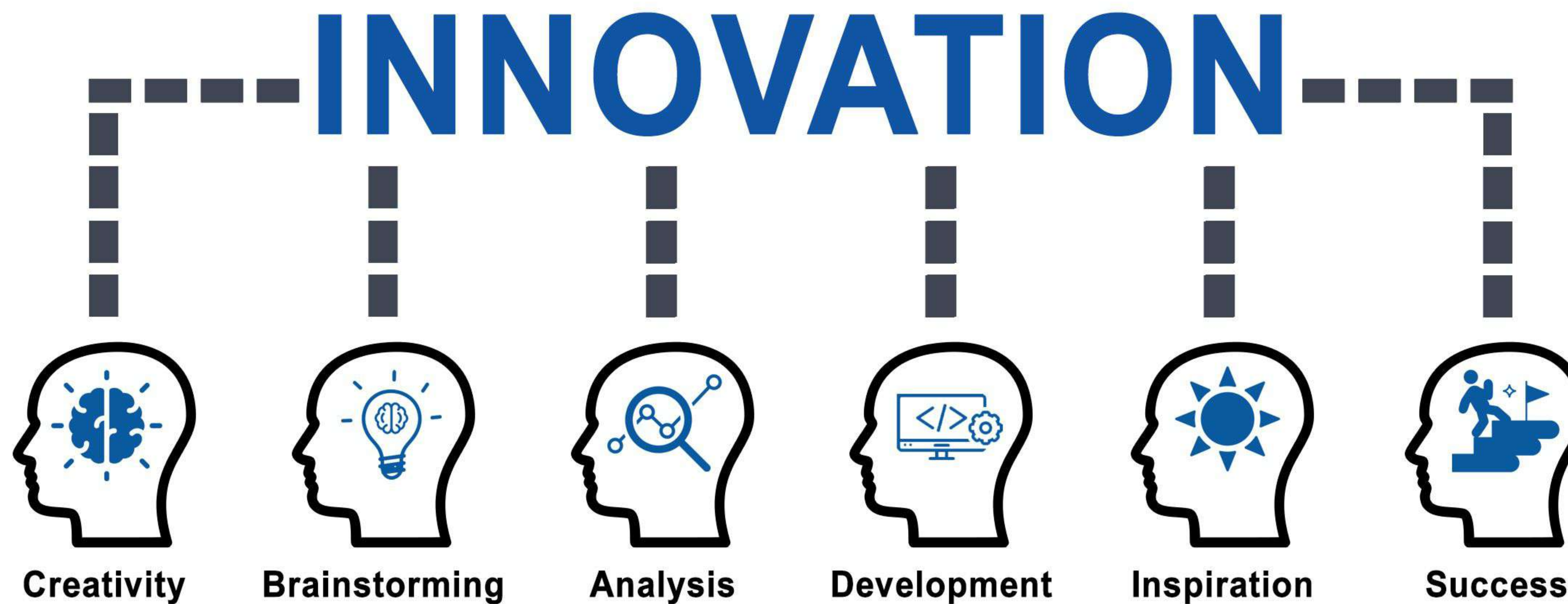


FRC connectivity features minimize the connection Error.



GIVE A WINGS TO INNOVATIONS

-  Factory Automation & Data Analytics
-  Machine Condition Monitoring
-  Energy & Building Automation
-  Environmental Monitoring
-  IoT-Smart Hospital
-  IoT-Smart Farming
-  Wireless Sensor Network
-  Smart Transport & Supply Chain
-  Control System & Big Data
-  Smart Health
-  Smart Parking
-  Water Quality





We Ship Worldwide

Our Shipping Partner



We Accept



Note:

1. Unless otherwise specified, all parameters in this datasheet were measured at 25°C and 75% humidity.
2. All index testing procedures in this datasheet are based on our company's corporate standards.
3. We offer product customization, OEM and ODM Services; please contact the sales team @ sales@rdltech.in.
4. We Ship Worldwide.
5. Specifications are subject to change without prior notice.
6. For additional information on Product and to buy online @ www.researchdesignlab.com

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