Dozens of countries have put forward “2050 Net-Zero Emissions” declarations and actions. To achieve net zero, companies can adopt demonstrated emission reduction measures to target emissions across their value chain and invest in innovative zero-carbon technologies. VHub ESG Solutions for Smart Factory help accelerate the transformation of manufacturing industries and bring competitiveness and environmental sustainability to meet the “Net-Zero” policy.

Enabling Digital Factory via One-Stop AIoT Services

- **M2M DAQ**: To minimize the energy demands of Edge devices, Vecow Edge Gateway supports IOTech, a software-based solution, and provides AI performance, making the digital factory possible.
- **Environment Monitoring**: Combining intelligent sensors and the Vecow EMS solution provides real-time energy status, analyzes data, alerts, and predicts maintenance for the OT devices.
- **Dynamic Analysis**: AI-powered smart cameras with OpenVINO and integrating Vecow Fever Scan Solutions, a contactless technology, factories can ensure workplace safety, hygiene and greater efficiency.
- **Health Care**: In order to enhance productivity, using real time object detection on production line, the Vecow VHub AI Developer Premium creates efficient ways to build AI models and integrates inference devices.
- **Optimized Productivity**: Workforce Management
- **Facility Management**: Environment Monitoring

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VHub ESG Solutions provide various AI tools to predict equipment maintenance schedule and optimize production capacity through facility parameters like water, oil and power at the edge. It helps the manufacturing industry improve the process, product quality and reduce costs.

**AI Data Analysis**

VHub ESG Solutions support many industrial grade protocols such as Modbus, OPCUA, and Onvif collecting data and integrating communications at the edge. It provides a variety of functions of applications in an easier way.

**Protocol & SDKs**

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**Partners**

**OT Devices**

**Training Server**
- **RCX-2000 PEG**
  - 11th Gen Intel® Xeon®/Core™ i7/i5
  - 1500W power budget supports max dual 750W 3-slot graphics card

**Training Server**
- **SPC-7000**
  - 11th Gen Intel® Core™ i7/i5/i3
  - Max DC 16V to 160V Wide Range Power Input, TSN, TPM 2.0 supported

**Edge Gateway**
- **EIC-2000**
  - NXP i.MX 8M Plus Arm Cortex-A53 Platform
  - Embedded Neural Processing Unit, max 2.3 TOPS AI performance

**Inference Platform**
- **ABP-3000 AI**
  - 8th Gen Intel® Core™ i7/i3
  - Optional built-in Hailo-8 AI Accelerator, up to 26 TOPS

**Inference Platform**
- **EAC-3000**
  - Small form factor, max 32 TOPS AI performance
  - 5 GigE LAN with 4 PoE+, 2 CAN Bus support Flexible Data-rate

**Edge Gateway**
- **AIC-100**
  - NXP i.MX6ULL Arm Cortex-A7 Platform
  - 512MB SDRAM, 512MB Flash