

Head Office

ADLINK Technology, Inc.

No. 66, Huaya 1st Rd., Guishan Dist.,
 Taoyuan City 333411, Taiwan
 Tel : +886-3-216-5088
 Fax: +886-3-328-5706

f in @ www.adlinktech.com

Worldwide Offices

Ampro ADLINK Technology, Inc.

6450 Via Del Oro, San Jose, CA 95119-1208, USA
 Tel: +1-408-360-0200
 Toll Free: +1-800-966-5200 (USA only)
 Fax: +1-408-360-0222
 Email: info@adlinktech.com

ADLINK Technology (China) Co., Ltd.

上海市浦东新区张江高科技园区芳春路300号 (201203)
 300 Fang Chun Rd., Zhangjiang Hi-Tech Park
 Pudong New Area, Shanghai, 201203 China
 Tel: +86-21-5132-8988
 Fax: +86-21-5192-3588
 Email: market@adlinktech.com

ADLINK Technology Beijing

北京市海淀区上地东路1号盈创动力大厦E座801室
 (100085)
 Rm. 801, Power Creative E, No. 1 Shang Di East Rd.
 Beijing, 100085 China
 Tel: +86-10-5885-8666
 Fax: +86-10-5885-8626
 Email: market@adlinktech.com

ADLINK Technology Shenzhen

深圳市南山区科技园南区高新南七道数字技术园
 A1栋2楼C区(518057)
 2F, C Block, Bldg. A1, Cyber-Tech Zone, Gao Xin
 Ave. Sec. 7 High-Tech Industrial Park S.,
 Shenzhen, 518054 China
 Tel: +86-755-2643-4858
 Fax: +86-755-2664-6353
 Email: market@adlinktech.com

ADLINK Technology Singapore Pte. Ltd.

84 Genting Lane #07-02A, Axxel Innovation
 Centre, Singapore 349584
 Tel: +65-6844-2261
 Fax: +65-6844-2263
 Email: singapore@adlinktech.com

ADLINK Technology India Private Limited

Ground Floor, 317, Samanvitha Complex,
 Mayura Street, Outer Ring Road, Byatarayanapura,
 Bangalore North, Bangalore- 560092, Karnataka
 Tel: +91-80-2346-4606 / +91-80-3121-3332
 Fax: +91-80-2346-4606
 Email: india@adlinktech.com

ADLINK Technology Japan Corporation

〒101-0045 東京都千代田区神田鍛冶町3-7-4
 三井物産ビル4F
 Unizo Kanda Kajicho 3 Chome Bldg. 4F,
 3-7-4 Kanda Kajicho, Chiyoda-ku,
 Tokyo 101-0045, Japan
 Tel: +81-3-4455-3722
 Fax: +81-3-5209-6013
 Email: japan@adlinktech.com

ADLINK Technology Korea Ltd.

경기도 용인시 수지구 신수로 767 A동 1503호
 (동천동, 분당수지유타워) (우) 16827
 A-1503, U-TOWER, 767 Sinsu-ro, Suji-gu,
 Yongin-si, Gyeonggi-do, Republic of Korea, 16827
 Toll Free: +82-80-800-0585
 Tel: +82-31-786-0585
 Fax: +82-31-786-0583
 Email: korea@adlinktech.com

ADLINK Technology, Inc. (Israel Liaison Office)

MIXER Herzliya (Building B, 9 Floor)
 3 Arik Einstein st., Zip code 4610301
 Herzliya, Israel, P.O.Box - 351
 Tel: +972-54-632-5251
 Fax: +972-77-208-0230
 Email: israel@adlinktech.com

ADLINK Technology GmbH

Hans-Thoma-Straße 11
 D-68163 Mannheim, Germany
 Tel: +49 621 43214-0
 Fax: +49 621 43214-30
 Email: germany@adlinktech.com

Ulrichsbergerstraße 17
 D-94469 Deggendorf, Germany
 Tel: +49 991 290 94-10
 Fax: +49 991 290 94-29
 Email: germany@adlinktech.com

ADLINK Technology, Inc. (French Liaison Office)

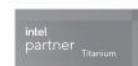
Bâtiment Thalès - Parc des Algorithmes,
 Route de l'Orme des Merisiers,
 91190 SAINT AUBIN, France
 Tel: +33 (0) 1 60 12 35 66
 Fax: +33 (0) 1 60 12 35 66
 Email: france@adlinktech.com

ADLINK Technology, Inc. (UK Liaison Office)

First Floor West Exeter House,
 Chichester fields Business Park Tangmere,
 West Sussex, PO20 2FU, United Kingdom
 Tel: +44-1243-859677
 Email: uk@adlinktech.com

Reliable, Flexible,
 Fulfilled Smart Factory

AIoT-Powered
 Smart Manufacturing
 Solutions



Smart Manufacturing Solutions

ADLINK offers comprehensive ready-to-deploy solutions for various automation control solutions to accelerate the implementation of Smart Manufacturing in industry

A Motion Control

- Integrated centralized and distributed motion control for optimal performance and precise positioning

B Machine Vision

- Full spectrum of image capturing solutions for product inspection

C IO Sensing

- Versatile I/O modules for seamless EtherCAT automation

D AI-enabled SOP Enforcement

- Clean Room standard procedure
- Hazmat offload standard procedure

E Data Acquisition

- Device condition monitoring
- Predictive maintenance

F AI-enabled Product Inspection

- Improved inspection speed and accuracy
- Reduce manpower and human error

G Energy Management

- Streamlined energy data conversion for centralized energy management
- Analyze power consumption hotspots to reduce carbon emissions

EdgeGO

H Condition Monitoring

- Instant monitoring and alarm
- Equipment life cycle warning

I Data to Decision

- Remote edge device management
- Data acquisition and visualization

J Virtual Fence

- Robot hazard prevention
- Protective equipment detection

K HMI

- Visualize filed site data
- Integrated with PLC and PC-based motion control

L AMR

- Integrated with Robot arm and other devices
- Fleet management

Product Solutions

Device Management Software



Motion Control and IO Sensing



Machine Vision



Edge AI Vision



Data Acquisition



PXI Chassis & Controller



Autonomous Mobile Robot



HMI Panel PC & Touch Monitor



AI-enabled Safety and Quality



Assembly SOP Compliance Monitoring

Real-time monitoring for accurate assembly with immediate inspections and image records reduce testing and extra costs. AI monitoring detects missing parts, ensures proper installation, and enables screenshot uploads for production records, improving yield rate and minimizing manual inspections.

Solution Features

- NEON all-in-one AI smart camera that saves cabling and deployment efforts
- Industrial-grade IM series true flat monitor for real-time SOP monitoring

Customer Benefits

- NEON built-in with EVA AI vision analytics software for faster time to application
- Upload cycle time logs and operational images files for analysis and traceability
- User alert for excessive assembly cycle time using digital I/Os



AI-based Defect Inspection for Food & Beverage Industry

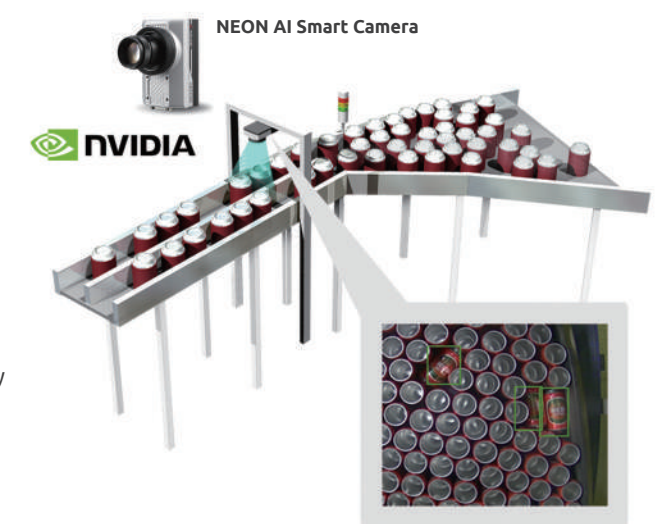
The food and beverage industry secure production quality with AI-powered smart cameras, enabling real-time inspection, defect detection, and process monitoring. With edge computing, the system ensures instant decision-making, enhancing quality control and operational reliability.

Solution Features

- NEON AI Smart Camera installed for real-time defect detection and monitoring
- Edge computing capabilities for instant decision-making and reduced latency
- Industrial-grade design for reliable operation in harsh environments

Customer Benefits

- The AI-enabled monitoring improves the accuracy and efficiency of defect inspection especially for high-throughput bottling applications
- Higher traceability with logging of production data for further analytics and improvement



Multi-Camera Inspection for Smart Phone Lens

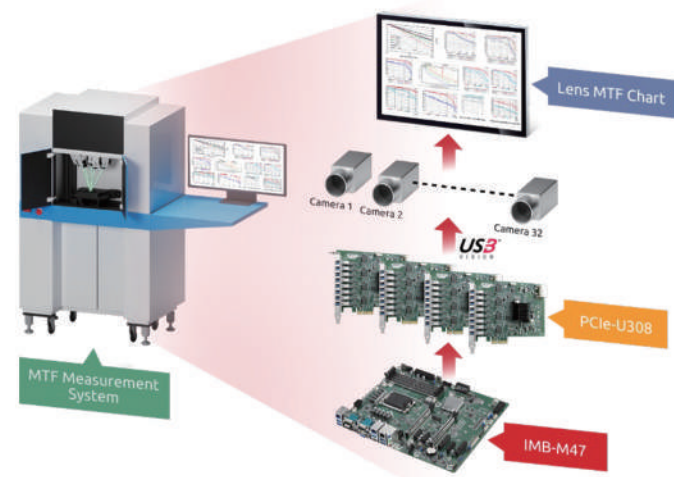
Simultaneously using multiple cameras to capture different areas ensures each lens meets quality standards from the center to edges, enabling fast defect detection and enhancing product quality.

Solution Features

- USB3 vision capture card that supports up to 12 USB ports for multiple cameras connections with data transfer up to 5 Gb/S and 1.5A per port
- IMB-M47 industrial ATX motherboards that supports the latest Intel processors and 128 GB DDR5 memory to fulfill edge AI applications

Customer Benefits

- ADLINK offers one stop shop for IPC and vision capture cards to deliver high stability, high efficient edge AI vision
- Guaranteed 7.5W per port power and 4-pin Molex connector for stable voltage ensures consistent grayscale and MTF values with no frame drops



Secure Chemical Unloading with AI-Based E-Fence

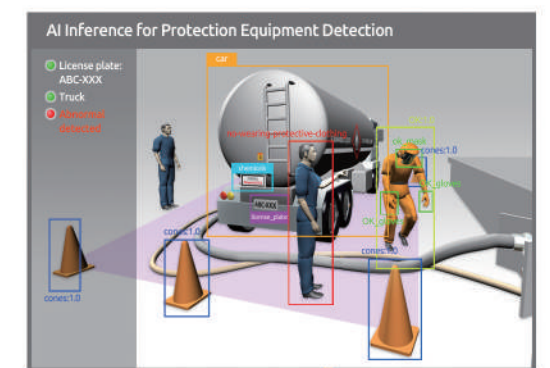
Hazardous chemicals offloading may risk personnel by human error, but it can be solved by installing AI-based E-fence. The E-fence uses the AI smart camera to detect and alert if any object or personnel enter the defined dangerous zones, greatly enhance worker safety.

Solution Features

- All-in-one NEON AI camera for easy installation and faster AI deployment
- Industrial-grade digital I/Os for lighting or alarm alters

Customer Benefits

- Solves the legacy compatibility and reliability issues, streamlines installation and maintenance, saving considerable costs and resources
- Eliminating encoding/decoding, retaining critical resources for inference, and resulting in higher frames-per-second with lower latency



Energy Efficient and Sustainable Factory



Factory Energy Management

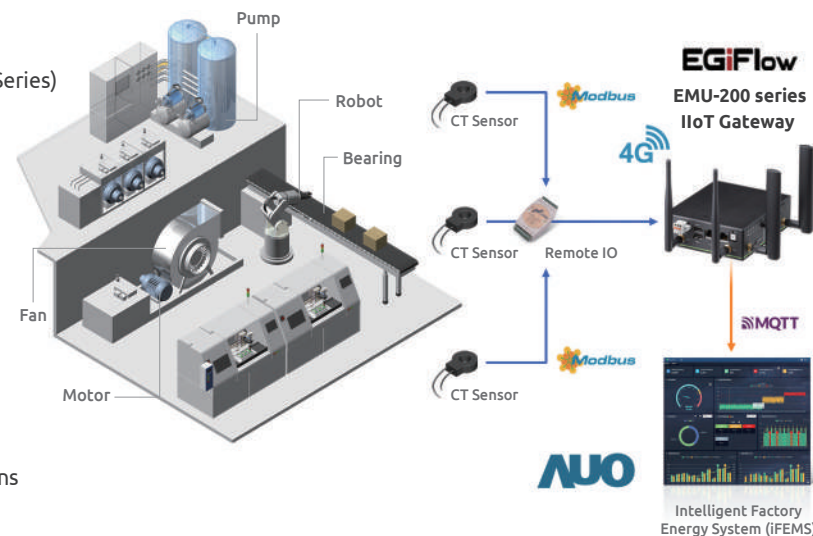
An Energy Management System (EMS) in smart manufacturing optimizes energy usage and reduces costs by utilizing Edge data transmission and analytics to monitor, control, and enhance energy consumption and production processes, thereby promoting environmental sustainability

Solution Features

- Arm-based programmable IIoT gateway (EMP-200 Series)
- Integrated CT sensors, remote I/O, IIoT gateways
- The IIoT Gateway support intelligent energy management software for dashboard and analytics

Customer Benefits

- Visualizes power data and detects abnormalities, ensuring the safe operation of electric systems
- Lower productivity cost and greater carbon reduction layout
- Able to collaborate with 3rd party software to deliver the integrated energy management solutions



ESG Carbon Emissions Solution

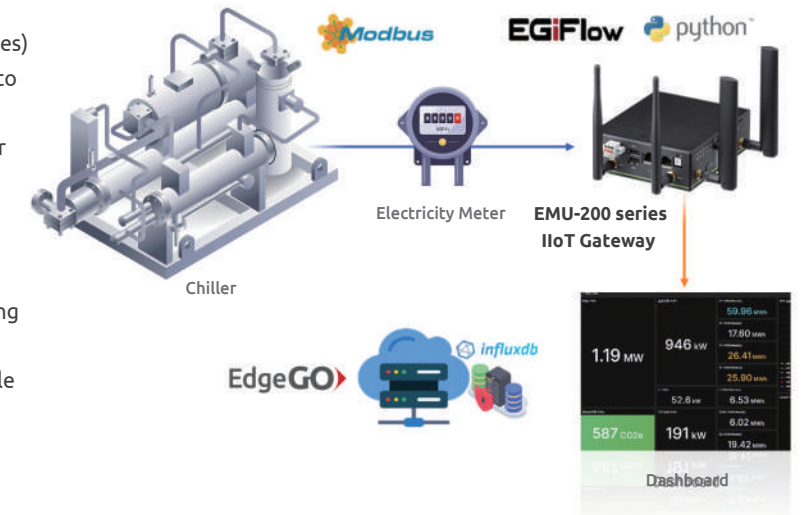
Meeting ESG goals requires accurate energy monitoring, but traditional methods lack real-time insights. The EMU-200 IIoT Gateway with built-in EGiFlow software delivers real-time data acquisition, analytics, and visualization to monitor energy consumption.

Solution Features

- Arm-based programmable IIoT gateway (EMP-200 Series)
- EGiFlow software with built-in Modbus RTU protocol to obtain electricity meter data
- Provides dashboard for energy consumption status for real-time monitoring and historical analytics

Customer Benefits

- Real-time energy monitoring for better decision-making
- Enhanced energy use efficiency & compliance
- Seamless integration & data visualization for actionable insights



Monitor PLC Power Consumption

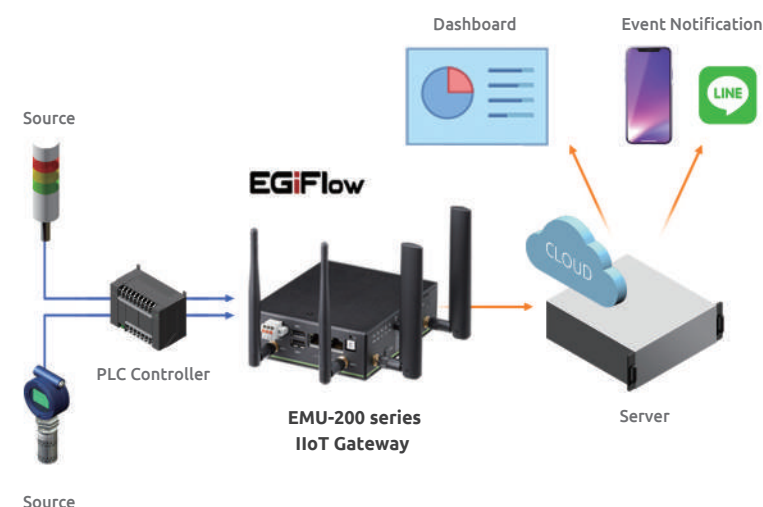
As industries strive for net-zero emissions, PLC-based equipment requires seamless integration for unified data and monitoring. ADLINK collaborates with SI partners to deliver fully integrated hardware and software solution for quick deployment.

Solution Features

- Application-ready IIoT Gateway to collect field data for analytics
- Data visualization with customized factory layout
- Integrated with ERP system for real-time business insights
- Event notification via mobile devices

Customer Benefits

- Real-time energy management dashboard
- Power overuse alerts, stay ahead of potential issues
- Uninterrupted data logging, no data loss during network outages



Battery Energy Storage Systems (BESS)

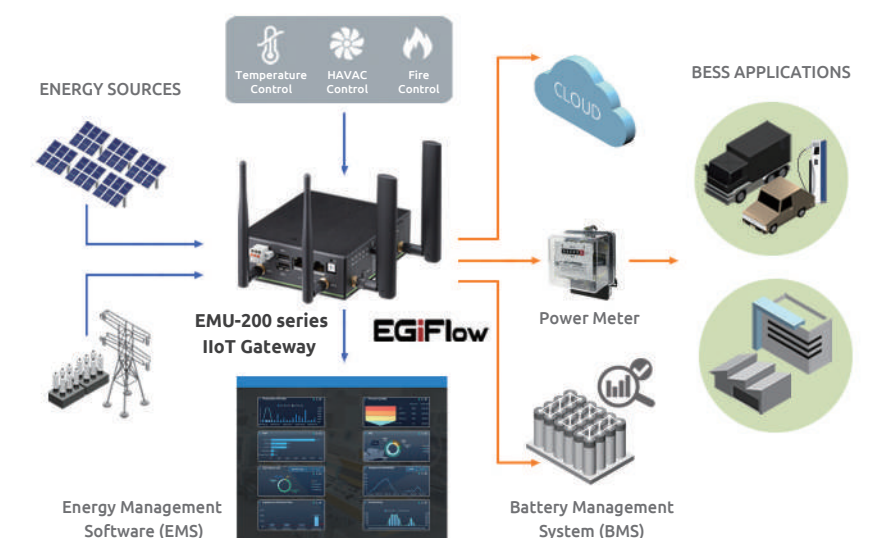
Battery Energy Storage System (BESS) plays a crucial role in modern energy management. With the built-in BMS (Battery Management System), it provides grid stability, and renewable energy integration to maximize the energy efficiency.

Solution Features

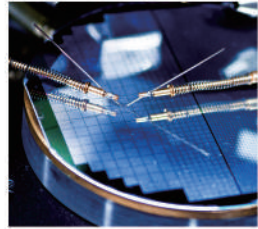
- Seamless connection of the energy data via the IIoT gateway (EMP-200 Series)
- Supports up to 8 battery packs for scalable power consumption
- Supports frequency & voltage regulation
- Stores excess solar power for later use
- Provides backup power for critical infrastructure

Customer Benefits

- Ensured battery reliability and lifespan
- Minimize thermal runaway and fire hazards
- Optimal power performance and costs



Precision and Efficiency in Semiconductor



AI Vision Boosts Die/Wire Bonding Inspection

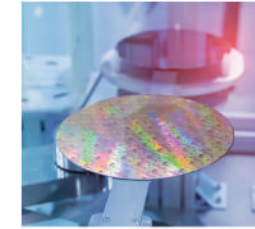
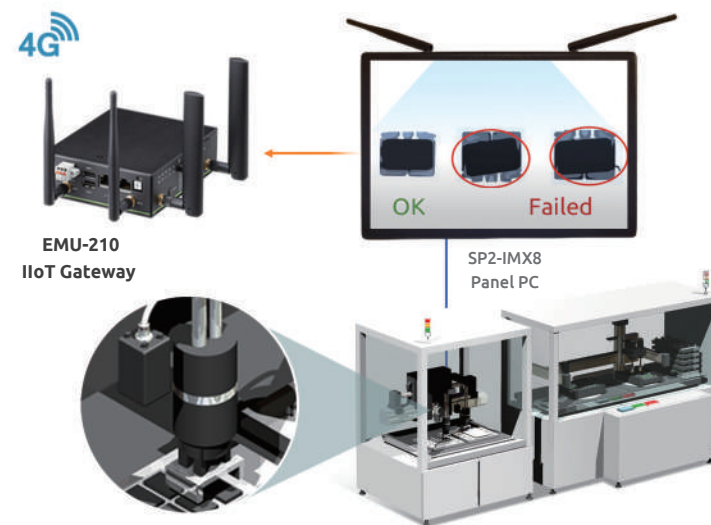
NXP Semiconductors' smart factory exemplifies the drive for predictive maintenance and automation in manufacturing. These solutions enable real-time AI computing for Automated Optical Inspection (AOI), laying the foundation for full predictive maintenance and continuous operational optimization.

Solution Features

- Comprehensive edge computing and display solutions
ARM based Panel PC + NXP eIQ AI training software
- IIoT gateway to transmit data securely
- Streamlined device management with EdgeGo® Platform
- Value-added service to meet customization

Customer Benefits

- Testing efficiency up by 5x with 99.99% product yield
- Centralized Edge Management with EdgeGo software
- Data Security with Edge Computing



Critical Equipment Monitoring for Predictive Maintenance

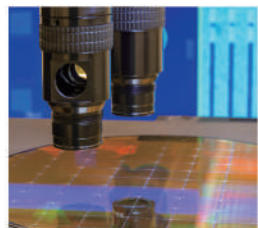
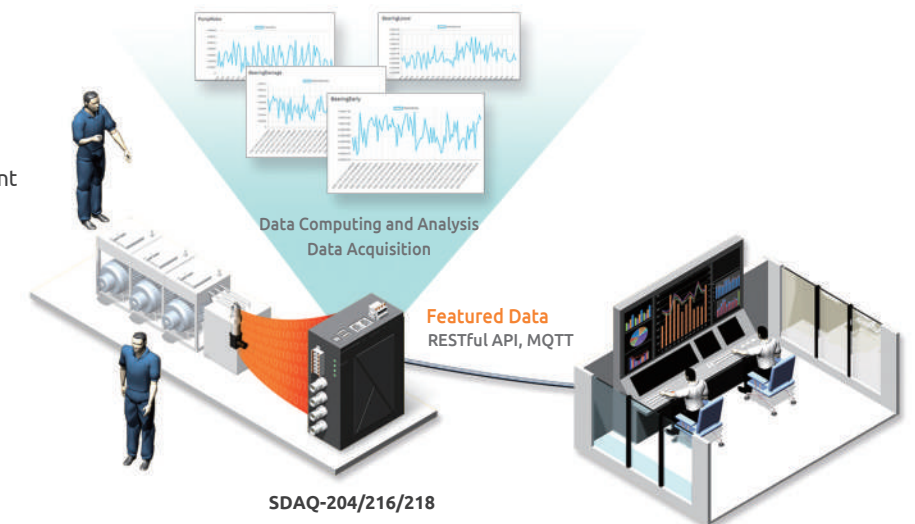
In semiconductor manufacturing, unplanned equipment shutdown can severely impact production yield. ADLINK's edge data acquisition solution enables real-time monitoring of equipment data and allow system integrators to easily perform advanced analytics for predictive maintenance.

Solution Features

- The SDAQ-200 edge DAQ supports real-time data analytics and decimation
- SDAQ-200 is built in DAQPilot utility for customized setup and mass device management

Customer Benefits

- Timely capture vibration, voltage and current Data of the critical assets
- Accelerate data analytics and diagnostics with simplified programming
- A centralized platform to check the status



Fast, Precise Wafer & Micro LED Inspection

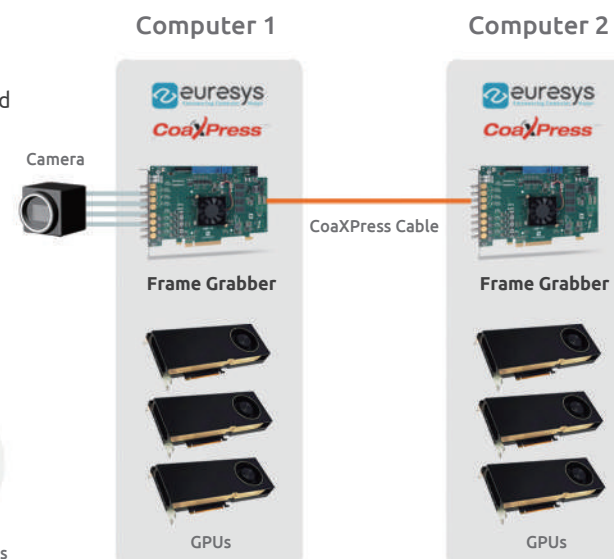
ADLINK's Edge AI vision, with advanced data forwarding, ensures high-speed image capture, processing, and real-time transmission, enabling higher yields, efficient manufacturing, and stringent quality assurance.

Solution Features

- Euresys Coaxlink series frame grabber supports image forwarding to up to 10 computers to meet high-throughput inspection demand
- One stop shop for frame grabber, GPU and IPC

Customer Benefits

- High bandwidth, high-speed capture over long cable distances
- Ultra low latency, up to 50Gbps for transmission up to 10 pcs
- Real-time distributed or rule-based image analysis



Maximize Productivity in Die Bonding

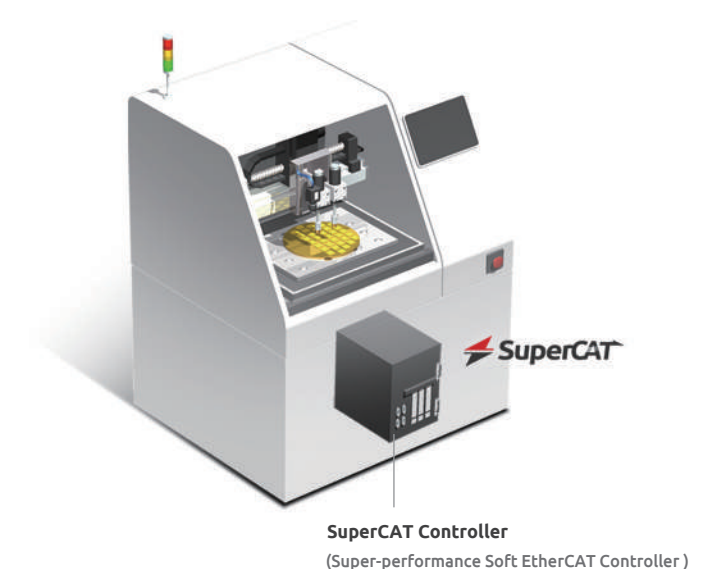
Semiconductor packaging equipment, particularly die bonding machines require high-speed and precise pick-and-place control aligned with the machine vision system and be capable of swiftly adjusting to fit various wafer types.

Solution Features

- SuperCAT controller effectively supports control parameter adjustment and maintenance on the IPC platform
- Achieve 125µs cycle time with multi-axis synchronous motion and machine vision control to ensure sub-micrometer positioning accuracy

Customer Benefits

- Ultra-fast throughput enhancing production efficiency
- Ensures high-accuracy die placement with synchronous motion and machine vision control
- Improves yield and consistency with precise motion and vision integration



Securing EV Battery Manufacturing Quality

ADLINK's one-stop solution empowers EV battery manufacturers with AI-driven defect detection and robust testing to ensure unmatched safety, reliability, and performance.

ELECTRODE MANUFACTURING

Inspect Battery Coating Quality with Line Scan Camera

Solution Features

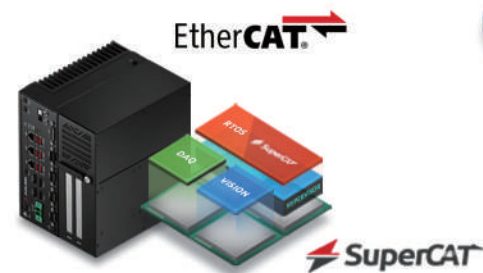
- High-resolution, continuous capture of coating thickness and defects
- AI-enabled defect detection to deliver real-time analysis
- Easily integrates into the existing battery production line

Products

- Euresys Open eVision Deep Learning Studio for AI training and evaluation
- PCIe-GIE74V/P frame grabber with PoE management



euresys
a TKH Vision brand



CELL ASSEMBLY

Lithium-ion Battery Electrodes Cutting & Welding

Solution Features

- Real-time motion control integrated with machine vision optimizes multi-axis coordination for complex welding patterns and high-speed cutting
- Reduces inconsistencies in cut edge smoothness, ensuring higher yields and battery quality

Products

- SuperCAT, ADLINK super-performance Soft EtherCAT controller supports for real-time multi-axis motion and machine vision control needs
- 125µs/16-axis control cycle, up to 128-axis synchronized control
- High system stability with less than 2 µs jitter

Electric Vehicle Battery Manufacturing

Battery Management System (BMS)

SMT Assembly Machine HMI

Solution Features

- Comprehensive industrial monitors and panel PC lineup
- Flexible value-added service and customization options
- Certificated EMC and ESD Class B testing
- On-Screen Display (OSD) button optimization

Products

- Industrial Touch Monitors with 7"-43" options and flexible value-added service



FORMATION & PACKING

Secure Cell Quality and Packing Testing with SMU

Solution Features

- A Source Measure Unit (SMU) is a high-precision instrument that can both source voltage/current and measure response characteristics simultaneously. In battery formation and packing, SMUs play a critical role in ensuring battery performance and safety through automated test sequences.

Products

- PXIe-9908 high-density SMU solution supports up to 160-ch testing
- High precision 100nA to 100mA current source and measure, and configurable ±30V or -10V/+20V voltage source and measure



Automated Material Handling

Background

A leading textiles and fiber company utilizes ADLINK's AMRs for material handling, achieving automated production and logistics with increased efficiency, reduced labor costs, and enhanced operational flexibility. This new deployment requires seamless integration with robot arm, production line and the factory facility.

Solution Features

- Multiple robot collaboration
- Precise tasking by vision-guided robot and AMR with positioning accuracy $\leq 1\text{mm}$
- Seamless cross-floor operation among AMR fleet, robot arms, production equipment, IT systems (WMS/MES/ERP), and even factory elevators

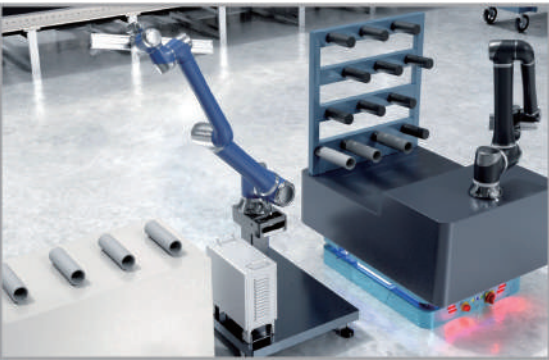
Offerings

SMR Series

Compact, sturdy, and intelligent AMR

- Powered by Swarm Core fleet management software
- Real-time synchronous communication between robots, conveyors, and racks
- Private 5G support to enable smooth mobility
- Streamlined OT & IT connection
- Support 250/1000 kg full loading

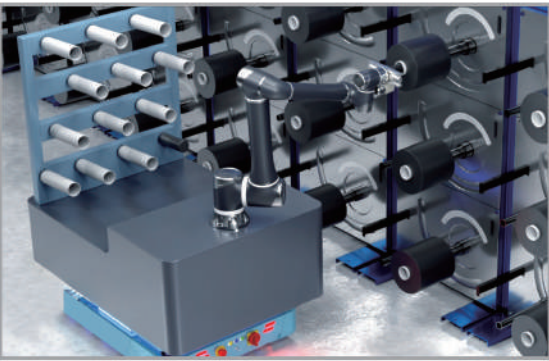
How ADLINK AMRs Help on the Floor?



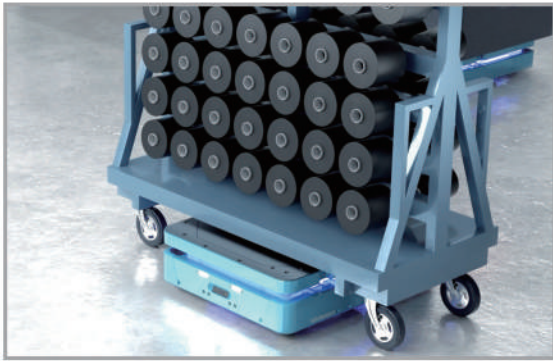
Reload the rolls with Cobot



Communicate with the elevator to move across floors



Pick and place the fiber rolls



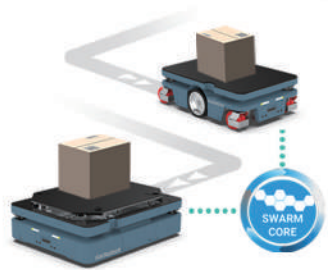
Transport the fully loaded cart with Lift AMR



Seamless Collaboration with Swarm Core



Streamline IT & OT Connection



Real-time AMRs Interoperability



Adaptive Navigation System

Optimizing production efficiency with material handling

SMR Series AMR

- **SMR250**
1.5 m/s max speed with 250kg payload
- **SMR1000**
1.0 m/s max speed with 1000kg payload



Heterogeneous Integration
Top-modules (robot arm, conveyor), IPC/PLC equipment, third-party AMRs and IT systems



Real-time Fleet Management
Task-oriented planning, dynamic routing and traffic re-scheduling



Optimized Safety
Automatic obstacle avoidance
Multi-safe zone & speed setting
ISO 3691-4 and EN1175 certified

EtherCAT-based Motion Control and I/O

APSDK Automation Software

- Built-in utility to manage ADLINK's motion and I/O products
- Hardware and OS independent

400+

motion functions with
no-code testing

SuperCAT

SuperCAT Series

PC-based Super-performance
Soft EtherCAT Controller

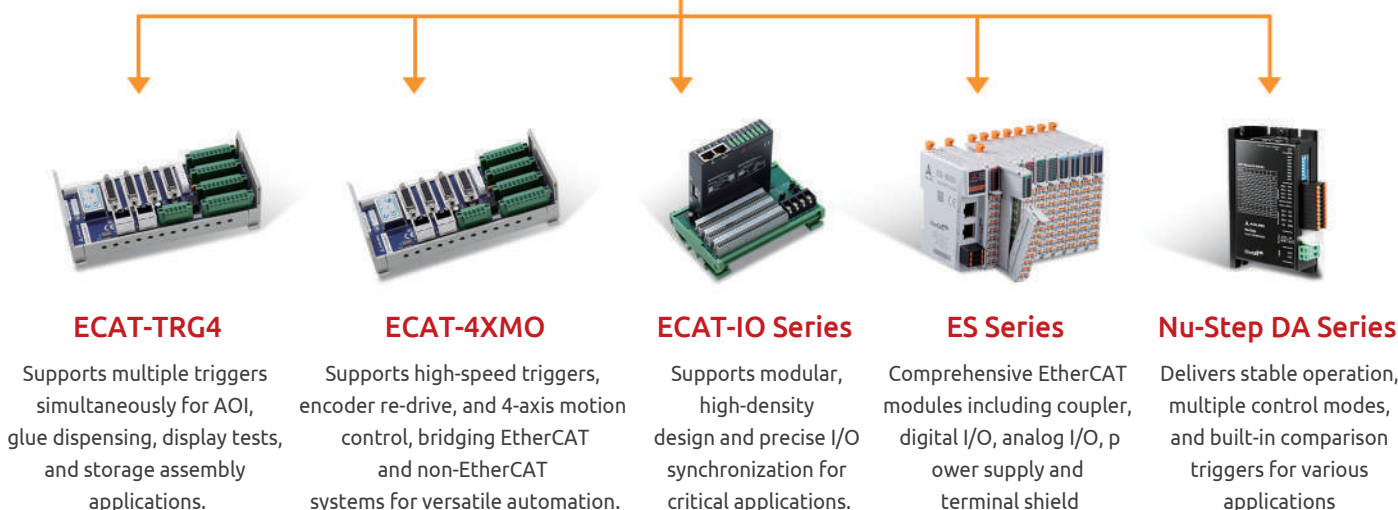
- Supports 125µs EtherCAT control cycle and up to 128 axis control
- Supports applications run in a real-time environment

EtherCAT

PCIe-8330 Series

PCIe-based Motion
Control Card

- Up to 64-axis control and 10,000 I/O point control
- EtherCAT cycle times up to 250µs



Camera



Light



Encoder



Servo



Stepper



AI



AO



DI



DO



Relay

AI Smart Camera

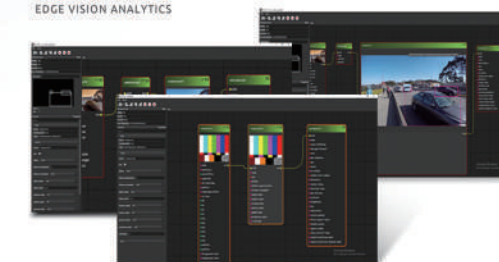
NEON AI Smart Camera

- NVIDIA® Jetson platform (Orin Nano™/ Xavier NX/Nano)
- All-in-one design minimizes cabling, footprint and maintenance
- Supporting various types of image sensors to fit user applications



EVA Edge Vision Analytics Software

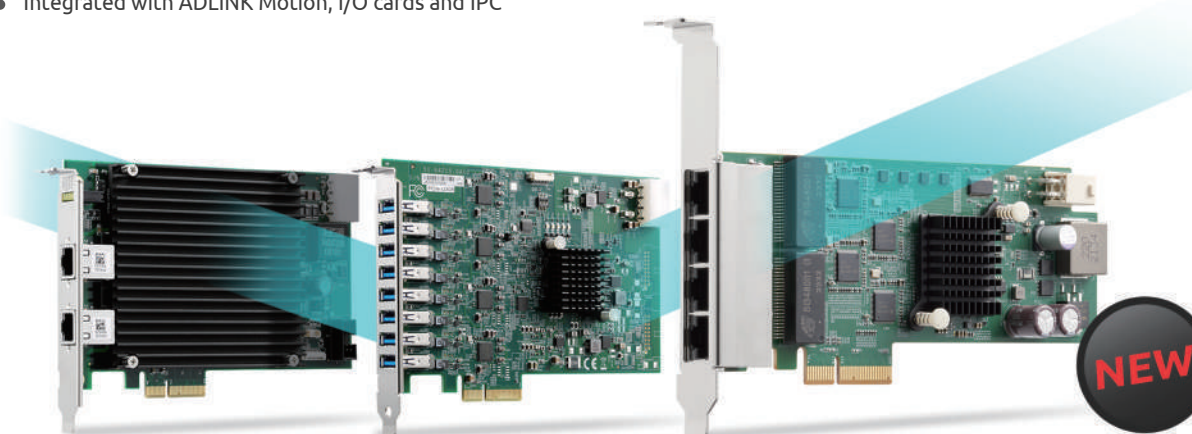
- No/Low-code Edge Vision Analysis
- Simplified image capturing
- Pre-processing and AI inference



Vision Capture Card

PCIe Series

- Full product line support, including analog, GigE Vision, USB3 Vision, CoaXPress, and Camera Link
- Compatible with most popular cameras and software
- Integrated with ADLINK Motion, I/O cards and IPC



PCIe-10GPoE

2-CH PCI Express®
10 GigE Vision PoE + Grabber



PCIe-U300

4/8/12-ch PCI Express x4 Gen2
USB3 Top Performing Grabbers



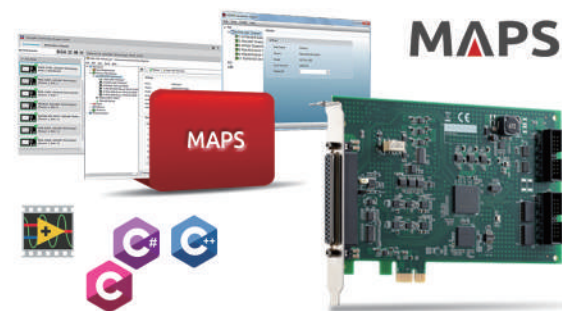
PCIe-GIE74V

4-ch PCI Express
GigE Vision PoE + Grabbers

PC-based and Edge DAQ

New-Gen PCIe-9100 Card

- Great flexibility with wide IPC compatibility
- High-performance synchronization capability
- Scalable functionality with motion/vision card



Standalone Smart DAQ

- Ethernet-based remote monitoring
- Easy configuration with web console
- Efficient mass device deployment



Application-Ready Gateway

EMU Series IIoT Gateway

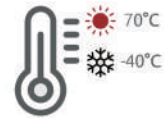
- Strong Edge-to-cloud Connectivity
- Built-in web console for data flow settings
- Deployment & Development Effort
- Compact, Reliable, Adaptable (-40°C to 70°C)



Low Deployment and Development Effort



Strong Edge-to-cloud Connectivity



Compact, Reliable, Adaptable

EGiFlow



EMU-200
Application-ready



EMU-210
5G-ready

PXI Express Gen3 Chassis & Controllers

PXES-2788 Series

- 18/21-slot 24GB/s High Power and High Cooling PXIe Chassis



PXIe-3900 Serie

- 11 th Gen. Intel Core-based PXI Express Controller



PXIe-9908 Series

- 4/8-CH PrecisionPXI Express Source Measure Unit (SMU)

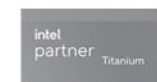


Source Measure Unit (SMU) Solutions

PXIe-9908

4/8-CH Precision PXI Express Source Measure Unit, Designed for Semiconductor and EV Battery Testing

- Up to 160-ch high-density testing
- 100nA to 100mA current source and measure
- Configurable $\pm 30V$ or $-10V/+20V$ voltage source and measure
- Up to $\pm 100V$ voltage measure (with 10 μA only) for specific test



Industrial Touch Monitors

Open Frame (OM Series)

- Easy for seamless integration
- 7"-43" screen options
- Fullscreen & Widescreen
- PCAP 10 points touch
- IP65 Rating protection
- Anti-fingerprint



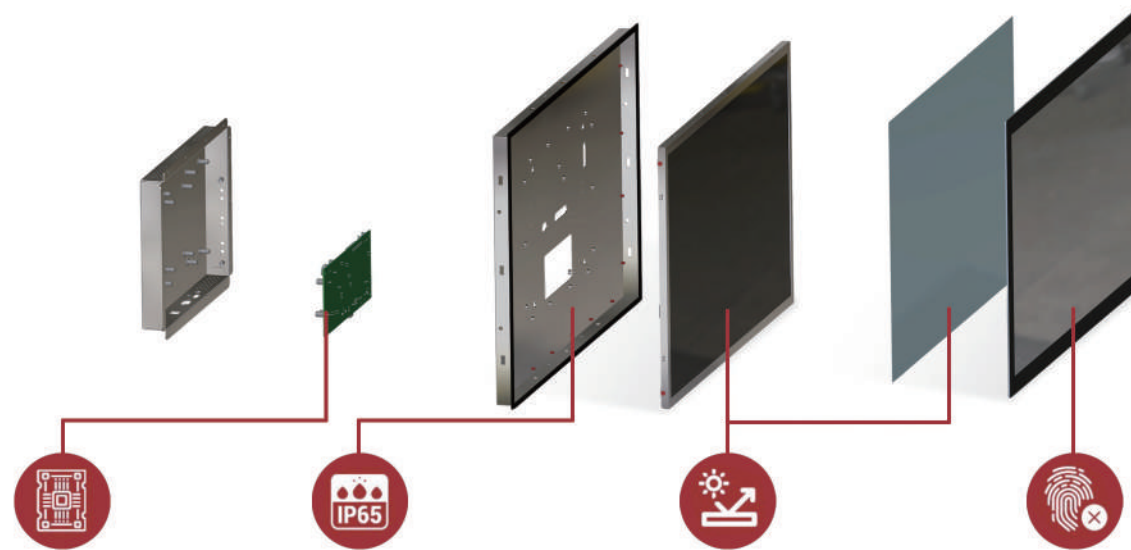
Standalone (IM Series)

- Plug-in and ready to display
- 15"-27" screen options
- Fullscreen & Widescreen
- PCAP 10 points touch
- IP65 Rating protection
- Anti-fingerprint



Value-Added Service

Superior flexibility with in-house customization expertise



Scaler & Firmware

- Scaler board design
- Dedicated Firmware
- Network Diagnostic
- Data Collection

Mechanical Design

- Aluminum, Steel, Stainless Chassis
- Open, Closed Frame, Flat Designs
- Optional IP65/IP69 Solutions
- Panel, VESA Mount Design

Optical Enhancements

- High Brightness Treatment
- Backlight Thermal Design
- Optical Bonding (Direct/Air)
- Privacy, UV Filters Laminating

Touch Solutions

- All Touch Technologies
- Decal Printing
- Vandal Proof, Anti-Fingers
- Multi-Touch, Gesture Control

Versatile Panel PCs

Open Frame (SP2 Series)

- Full customization
- Wide computing range
- 7"-21.5" touchscreen options
- Voltage range 9-36V DC
- Power Over Ethernet
- EMC testing & ESD tolerance



All-in-One (PanKonix Series)

- Hybrid PLC and PC-based motion control
- Full-featured HMI software
- 7"-21.5" touchscreen options
- Voltage range 9-36V DC
- IP65 Rating protection
- Standard VESA mount



ARM-Based (SP2-IMX8 Series)

- NXP® I.MX 8M Plus processor
- NPU inside with 2.3 TOPS
- 7", 10" touchscreen options
- Flexible function expansion
- SBC customization available
- OS: Linux, Windows, Android



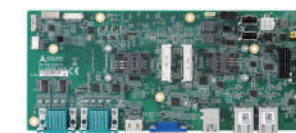
Rugged IP69K (Titan2 Series)

- 11th Gen Intel® Core™ processor
- Stainless Steel (314, 316)
- 15.6"-23.8" touchscreen options
- All M12 type connectors
- High Brightness (Optional)
- VESA, Yoke, Pipe mount



Function Board Modules (FM)

Standard



- Flexible features expansions
- Easy and fast upgrade
- Board-to-board connector

USB



- Depart I/O from edge of PCB
- Board-to-Board connector to main board

Titan



- Vertical-Focused Modular Design
- Add-On Expansions (More by Request)