



## AUO Unveils Brand New Operations and Maintenance Technology for Integrated Energy Generation, Storage, and Management

Cleaning Robots, Drones, and AUO SunVeillance PV Smart Cloud System for Engineering, Procurement, and Construction Domains Shine at Energy Taiwan 2022

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Environmental degradation and energy shortages worldwide make the acceleration of energy transformation in Taiwan more critical than ever. The top priorities now are renewable energy autonomy and diversity. AUO is a member of the RE100 global renewable energy initiative and the first enterprise in the global display manufacturing industry to commit to using 100% renewable energy by 2050. At the Energy Taiwan 2022 exhibition running from October 19 to October 21 at the Nangang Exhibition Hall I, Taipei, AUO will showcase how the company expanded beyond photovoltaic (PV) module hardware into power plant construction, its turn-key solution for energy generation, storage, and management through the integration of software and hardware services, brand new operation and maintenance (O&M) technologies, as well as smart energy conservation and carbon reduction solutions from group affiliates to demonstrate AUO's commitment to building a future of sustainable green power.

# Advanced Corrugated PV Panels, Smart Cleaning Robots, and Drone Technologies Supporting Operations and Maintenance for Engineering, Procurement, and Construction

AUO leveraged its extensive project management experience and technical expertise to expand from being a supplier of high-quality hardware modules into power plant investment, construction, and O&M. AUO's design and application of building materials integrate software and hardware resources with partners to master energy generation and storage at power plants. These develop into successive generations of turn-key PV solutions.

Engineering, Procurement, and Construction (EPC) of power plants, for example, places a strong emphasis on high quality. The advanced AUO SunSteel, corrugated PV panels that integrate PV modules with high-peak corrugated panels, are pre-assembled PV systems that eliminate metal supports required for conventional PV system installation and reduces the weight by 25%. Have been upgraded from a single layer into a double-layer glass structure, increasing its durability in mechanical strength and weather resistance and making it suitable for various domains.

AUO also introduces new technologies for site O&M. Regular cleaning of modules is essential to solar power plants as their cleanliness impacts the module service life, generating capacity, and overall return in investments. The combination of smart

cleaning robots, sensors, and AI data analytics that AUO will showcase at Energy Taiwan will not only effectively removes the stains from modules but also analyzes the cleaning performance of before-after results to reduce O&M cost significantly; AUO uses drones equipped with IR sensors which are used to conduct comprehensive module health diagnostics. In human-machine collaboration and real-time AI surveillance technologies, the AUO SunVeillance PV Smart Cloud System allows defective modules to be located and repaired. Other advantages include lower workforce costs, improved inspection quality, and higher power output.

### Total Solution for Energy Generation, Storage, and Management through Software and Hardware Integration

The expansion of renewable energy sources such as solar power means a large number of intermittent power supplies will be connected to the energy grid ultimately. A stable energy storage system is needed to optimize energy and generation performance. AUO's energy storage system can be applied to energy generation, transmission, and consumption. AUO's customized software, hardware integration and controls for different customer-based scenarios to provide the most appropriate and comprehensive energy storage solution. These include the Automatic Frequency Control (AFC) energy storage deployment, energy storage for enterprise users, microgrid deployment, and home energy storage products that improve the self-consumption rate of green power and tariff optimization in satisfying the requirements of energy transformation. For energy management, internally developed data collectors are combined with energy storage systems for grid regulation. A more responsive, adaptive, and efficient energy management model is achieved through Al data management and surveillance of power usage.

AUO hopes to deliver exceptional customer-based energy benefits through integrated software and hardware solutions. In accelerating the transition to sustainable green power, AUO Energy Shop, an AUO e-commerce platform, was launched to provide customers with Online-to-Offline cross-channel services available anywhere, anytime. The one-stop-shop service not only simplifies the customer procurement process but also revitalizes the green energy trading market so everyone can enjoy the sunlight.

### AUO Smart Grid Solution and AUO Envirotech ACA Carbon Management Platforms Deliver Corporate Energy Savings and Carbon Reduction

The global trend towards net zero carbon emissions means we must take action on carbon reduction. AUO had previously applied power usage data management and the carbon management platform to its smart manufacturing for energy conservation and carbon reduction. It is now converting its successful experience into a service solution that others can use. AUO Digitech also demonstrates its "Smart Grid Smart Energy Management System" to reduce costs and energy consumption. By helping businesses examine their data for energy-intensive equipment, clients can then reduce non-production line energy consumption. The improvement in energy efficiency helps to realize the vision of sustainability and promote the sustainable growth of the industry. AUO Carbon Agent (ACA), developed by AUO Envirotech, helps businesses conduct digital inventory analysis from their carbon emissions data. Visualization of management reports allows businesses to draft methods to net zero carbon emissions and imply effective energy conservation and carbon reduction. At the same time, ACA encourages the industry to embrace net zero transformation and accelerate with the

global pace of energy transformation so that we can all work towards realizing the vision of green sustainability with net zero emissions.

AUO photos can be downloaded at the Company's website:

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#### **ABOUT AUO**

Founded in 1996, AUO is an enthusiastic, technology-driven company, delivering products and solution services that advance the frontier of innovation for display, system solutions, industrial intelligence, healthcare, and energy. The company is based in Taiwan and operates across Asia, the US and Europe, with a global team of 38,000 people. Additionally, AUO has also been named to the Dow Jones Sustainability World Index since 2010. AUO's consolidated net revenues in 2021 were NT\$370.69 billion. For more information, please visit AUO.com.

#### Safe Harbour Notice

AUO Corporation ("AUO" or the "Company") (TWSE: 2409), a global leader of TFT-LCD panels, today announced the above news. Except for statements in respect of historical matters, the statements contained in this Release include "forward-looking statements." These forward-looking statements are based on our management's expectations, projections and beliefs at the time regarding matters including, among other things, future revenues and costs, financial performance, technology changes, capacity, utilization rates, yields, process and geographical diversification, future expansion plans and business strategy. Such forward looking statements are subject to a number of known and unknown risks and uncertainties that can cause actual results to differ materially from those expressed or implied by such statements, including risks related to the flat panel display industry, the TFT-LCD market, acceptance of and demand for our products, technological and development risks, competitive factors, and other risks. In addition, our Annual Report contains other information on these and other factors that could affect our financial results and cause actual results to differ materially from any forward-looking information we may provide. We undertake no obligation to update or revise any forward-looking statements to reflect subsequent events, new information or future circumstances.

### For more information, please contact:

AUO Corporate Communication Division

Jessie Lee Tel: +886-3-5008800 ext 503206 Email: jessie.jc.lee@auo.com