

September 16, 2026

Fuji Electric Co., Ltd.

**Contributing to Stable Plant Operation with High-Speed, Large-Capacity Data Processing
and High Reliability**
Launching the XCS-5000 Controller for Monitoring and Control Systems

Fuji Electric Co., Ltd. (FE) is pleased to announce that it has launched the XCS-5000 controller for monitoring and control systems, which complies with the international communication standard OPC UA* to enable secure data linkage and which offers high-speed, large-capacity data processing capability and high stability.

*An international standard in the field of industrial automation (IEC 62541) that enables secure connections between devices across different manufacturers or operating systems.

1. Background

In recent years, with DX on production sites and the transition to smart factories in the industrial plant industry, there is growing demand for stable system environments that enable smooth data linkage between systems that control equipment and machines (OT systems) and enterprise-wide information management systems (IT systems). While conventional controllers offer excellent resilience in terms of not stopping the system when problems occur (high availability), they have difficulty in processing large amounts of data and in using common communication standards to connect various devices on production sites.



XCS-5000

The newly released XCS-5000 controller achieves high-speed and large-capacity data processing while still maintaining the same high availability as conventional models. In addition, its compatibility with OPC UA, which provides high connectivity and security between systems, means that it can offer significantly better data linkage functions while maintaining system reliability. These features allow it to contribute to stable operation and DX at customer factories.

2. Features

(1) Achieving advanced data processing with larger capacity and significantly improved control performance

The product incorporates improvements over previous models, including twice the input/output memory capacity, up to ten times the command processing speed, three times the application execution performance, and eight times the Ethernet communication performance. This allows it to achieve fast yet stable processing of large amounts of data from plants that are increasingly large and complex, flexibly meeting customers' advanced system requirements.

(2) Contributing to seamless data linkage with an OPC UA server function

The controller has an OPC UA server function as a standard feature to achieve seamless and highly reliable data linkage between OT and IT systems. It can also track and store plant data over a long period of time using SD cards. These features facilitate the effective collection and analysis of operation data and help customers transition to smart factories on their production sites.

(3) More reliable hardware through an error correction function

The controller has an error correction function, which automatically detects and corrects bit errors that occur during data storage and communication in the processor's cache memory and main memory. The reliability of this function has been enhanced by expanding the monitoring range and adopting FinFET*. This has greatly increased its resistance to software errors that can be caused by electrical noise in the factory. The XCS-5000 controller contributes to stable operation of customer facilities and to business continuity by reducing the risk of abnormal plant outages due to unexpected problems.

*A transistor with a three-dimensional current path. It provides superior power saving compared to flat transistors by reducing current leakage.

3. Launch Schedule

The date of this announcement

4. Product Inquiries

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