



MITSUBISHI ELECTRIC CORPORATION

PUBLIC RELATIONS DIVISION

7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

FOR IMMEDIATE RELEASE

Customer Inquiries

Overseas Marketing Department Factory Automation Systems Group Mitsubishi Electric Corporation www.MitsubishiElectric.com/fa/support www.MitsubishiElectric.com/fa

No. 3187

Media Inquiries

Public Relations Division

Mitsubishi Electric Corporation prd.gnews@nk.MitsubishiElectric.co.jp www.MitsubishiElectric.com/news/

Mitsubishi Electric to Launch iQ Edgecross Software

Will leverage proprietary AI technologies to increase production-shop efficiency and quality through enhanced preventive maintenance

TOKYO, April 19, 2018 – <u>Mitsubishi Electric Corporation</u> (TOKYO: 6503) announced today that it will launch a real-time data analyzer and four data collectors sequentially from the end of June 2018 as additions to its iQ Edgecross edge-computing software lineup. iQ Edgecross products support the Edgecross open software platform used to integrate factory automation (FA) and information technology (IT). The real-time data-analyzer is software equipped with proprietary artificial intelligence (AI) for data analysis and diagnostics, which customers will use to strengthen preventive maintenance and quality in their productions shops. The data collectors will enable easy, high-speed collection of data. Together, the new products will improve efficiency by strengthening edge computing in Mitsubishi Electric's e-F@ctory integrated FA solutions, which customers use to reduce total costs of development, production and maintenance.



Role of iQ Edgecross in e-F@ctory solution

Key Features

1) Real-time data analyzer with AI strengthens preventative maintenance

- Performs real-time analysis and diagnosis of production systems under operation, using one software instead of separate software for different purposes (i.e., offline analysis and real-time diagnostics).
- Improves the accuracy of detecting equipment anomalies during real-time diagnostics using similar waveform recognition technology—a Mitsubishi Electric Maisart¹ AI technology—to learn and recognize data, such as sensor waveform patterns.
- Implements preventive maintenance and quality improvement without additional programming. In the event of problems, in addition to using AI technologies, factor analysis has been simplified with statistical diagnostic tools, such as the Mahalanobis-Taguchi method (detects differences from normal operations using correlations between data sets) and multivariable regression analysis for data.

¹ <u>M</u>itsubishi Electric <u>AI</u> creates <u>S</u>tate-of-the-<u>ART</u> technologies: Branded fundamental and applied AI technologies Maisart

2) Factory floor data easily collected at high speed using four types of data collectors

- Easily collects data from equipment and devices through data collectors that support SLMP², OPC UA³ and MTConnect⁴.
- Data collectors are fully compatible with the CC-Link IE Field Network for high-speed data collection (up to 1ms) at production sites to assure highly accurate equipment control⁵.

³ Platform-independent communication standard developed by OPC Foundation in USA

⁴ Communication standard for machine tools set by MTConnect Institute in USA

⁵ Pre-installed in Mitsubishi Electric MELIPC MI5000 Series industrial-use computers. (Please refer to news release, "Mitsubishi Electric to Launch MELIPC Series Industrial Computers," released April 19, 2018.) In the future, the company plans to sell the software as a stand-alone product

Sales Schedule

Product	Shipment date
Real-time Data Analyzer	Sequentially from the end of June 2018
SLMP Data Collector	
OPC UA Data Collector	
MTConnect Data Collector	
CC-Link IE Field Network Data Collector ⁵	Sequentially from the end of June 2018

Features of Other Upgraded Products

GT SoftGOT – GOT-compatible HMI software

Displays plotting data from GOT2000 Series programmble indicators in various Edgecross-compatible data formats on computer monitors.

- GT Works3 (including GT SoftGOT2000)
- License key for GT SoftGOT2000

The above products are also available through the Edgecross Consortium (Marketplace).

² Seamless Message Protocol: Common protocol that enables different applications to communicate each other free of the network limitations/boundaries of Ethernet products or CC-Link IE-compatible devices

Background

Due to the increasing incorporation of the Internet of Things (IoT) and AI technologies in production processes, solutions that implement simple and swift data collection, visualization and data diagnostics are in demand at advanced production sites. In response, Mitsubishi Electric is introducing AI-embedded data analysis/diagnostic software and data collectors for easy data collection from a wide variety of devices. They are being added to Mitsubishi Electric's lineup of iQ Edgecross software products, which support the Edgecross open platform for FA-IT coordination. Customers will use these new offerings to leverage edge computing in enhanced e-F@ctory solutions for improved real-time production efficiency. Going forward, Mitsubishi Electric will continue to drive manufacturing innovation by expanding its iQ Edgecross lineup and further introducing AI technologies at production sites.

About Maisart

Maisart encompasses Mitsubishi Electric's proprietary artificial intelligence (AI) technology, including its compact AI, automated design deep-learning algorithm and extra-efficient smart-learning AI. Maisart is an abbreviation for "<u>M</u>itsubishi Electric's <u>AI</u> creates the <u>S</u>tate-of-the-<u>ART</u> in technology." Under the corporate axiom "Original AI technology makes everything smart," the company is leveraging original AI technology and edge computing to make devices smarter and life more secure, intuitive and convenient.

Patents

Patent applications planned for the technology announced in this news release number eight in Japan and abroad.

Pending patents for the technology announced in this news release number five in Japan and abroad.

e-F@ctory, MELIPC, CC-Link IE, SLMP and Maisart are registered trademarks of Mitsubishi Electric Corporation in Japan and other countries.

Approval of the trademark of iQ Edgecross and Real-time Data Analyzer are pending. Edgecross Consortium is currently applying to register the Edgecross trademark.

###

About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,238.6 billion yen (US\$ 37.8 billion*) in the fiscal year ended March 31, 2017. For more information visit:

www.MitsubishiElectric.com

*At an exchange rate of 112 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2017