

October 2025
Fuji Electric Co., Ltd.

MICREX-SX Series SPH

Announcement of OPC UA Server Feature Support

for SPH5000H

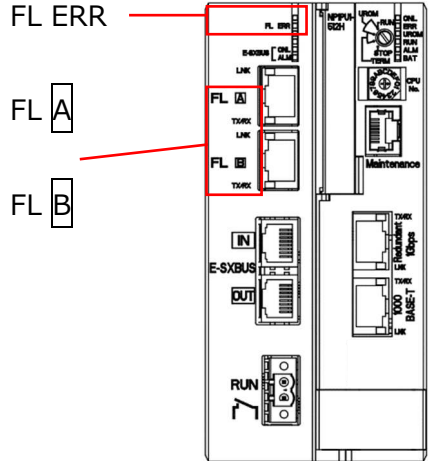
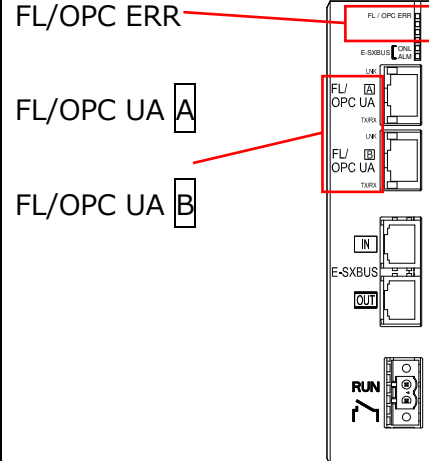
Thank you for using our Fuji programmable controllers.

We hereby announce that we have implemented an additional communication feature enabling compliance with the international standard OPC UA for CPU module SPH5000H in MICREX-SX series SPH.

1. Details of the Change

We hereby announce that, in the MICREX-SX Series SPH CPU module SPH5000H, we have added an OPC UA server communication feature. This enhancement enables data integration not only between controllers but also among a wide variety of devices, including information systems computers.

Target Product : MICREX-SX series SPH CPU module SPH5000H (Model : NP1PU1-512H)

Item	Before Change	After Change
Appearance	Printing of the front case : FL ERR FL A FL B 	Printing of the front case : FL/OPC ERR FL/OPC UA A FL/OPC UA B 
OPC UA	-	Support OPC UA Server *It can be superimposed on the FL-net line. *Please refer to section 3 for the details of the specification.

User ROM card	SDHC (Up to 32GB) Default Speed	SDHC (Up to 32GB) Conform to UHS-I (Ultra High Speed: Speed Class 1)
Time Synchronization	Time Synchronization by using SNTP client FB on application	Time synchronization can be set on the support tool. (It also supports SNTP client FB as before)

*When using programming support tool, please use SX-Programmer Expert (D300win) V3.7.5 or later version.

2. Notes on the Change

The change will be started with products that are manufactured in November 2025, and it will be automatically switched after using up the stock.

3. Details of OPC UA Server

Item		Specification	
OPC UA Version		1.04	
Support Profile		Micro Embedded Device 2017 Server Profile	
Transport / Encode		UA-TCP UA-SC UA-Binary	
Superimposition on the FL-net line		Support	
Publish target variable		IQ, M, SM memory assigned to Global variables	
Max no. of sessions		16	
Max no. of nodes that can be registered		44,000	
Read/Write point		250 points / Request	
Monitoring and subscription	Max no. of subscriptions	1 session	10
		All session	160
	No. of monitoring nodes	1 subscription	20,000
		All subscriptions	72,000
	Monitoring cycle		200ms~4000ms (Specified in 100ms increments)
	Monitoring performance		32,000 points/s
	Subscription performance		3,200 points/s
Register of monitoring nodes		1,000 points/1 Request	
User Event	Max no. of events		16000 points
	Detection performance		32 events/ms
	Event detection cycle		200ms~4000ms (Specified in 100ms increments)
	Save destination		User ROM
	Save method		Overwrite
	History count		1000 files 1024 histories per file.
System Event	Event variables		IQ (except SX bus IQ), M, SM - BOOL type memory assigned to Global variables
	Sampling target		Saves the history of events and failures that occur in the CPU module
	Collect timing		Timing of system event occurrence
	Sampling destination		User ROM, SRAM
	Save method		Overwrite
Historical Access	History count		1000 files 1024 histories per file.
	Target variables		IQ (except SX bus IQ), M, SM memory assigned to Global variables
	Max no. of save points		4000 points (Regardless of cycle)
	Save cycle		200ms~4000ms (Specified in 100ms increments)
	Save destination		User ROM
	Save method		Overwrite
History count		1000 files Approx. 58 days maximum when save cycle of 4,000 ms and 4,000 points WORD data type.	
Redundancy		Disclose server status depending on Service Level. The client checks the server status and selects the connection destination.	