



NO: PC-270 **PRODUCT:** CS1W-MCH71 Motion Controller Unit
DATE: April 2013 **TYPE:** Discontinuation Notice

CS1W-MCH71 Motion Control Unit with Mechatrolink-II Network for CS1 PLCs to be Discontinued February 28, 2014

Omron continues the migration away from Mechatrolink-II and toward EtherCAT as the motion network of choice to handle high speed, highly synchronized motion control.

The CS1W-MCH71 PLC-based motion control unit with Mechatrolink-II interface for CS1 platform PLCs will be discontinued February 28, 2014 and replaced by NJ501-1400, capable of handling 32 axes of motion control.



CS1W-MCH71 NJ501-1400

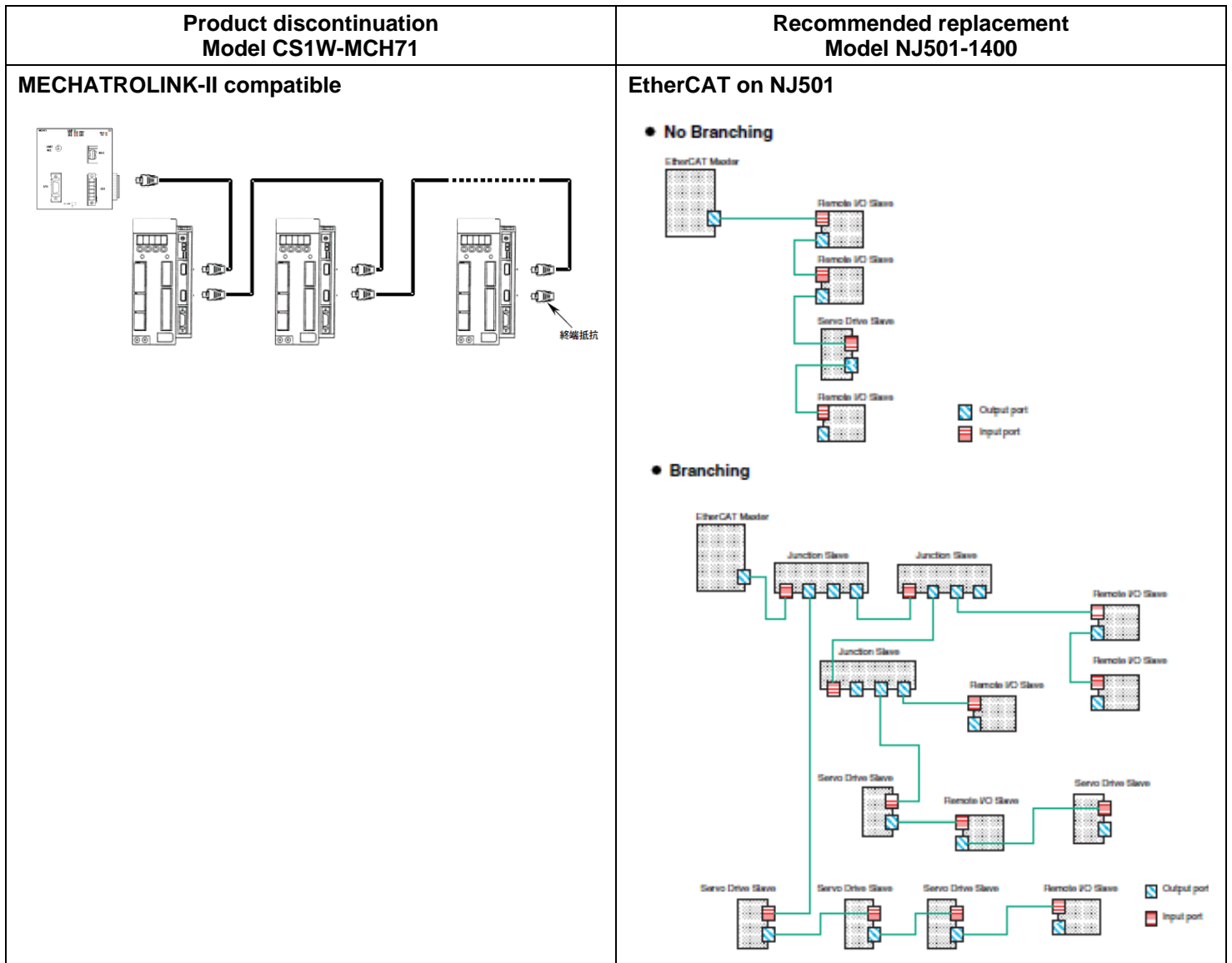
Affected Parts

Product discontinuation	Recommended replacement
CS1W-MCH71	NJ501-1400

Precautions on Applying Replacement

NJ501 CPU is not a direct replacement and will require design and program changes. For differences in dimensions, networks and specifications, see below.

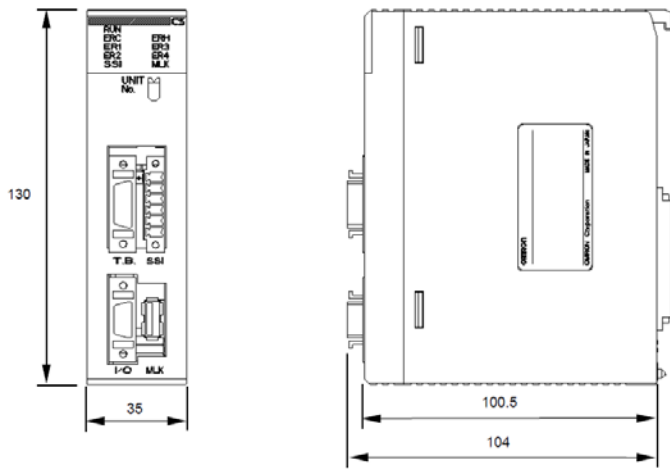
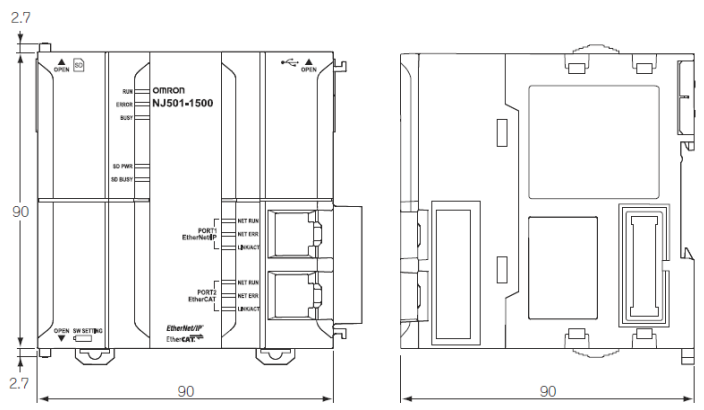
Network Connection



Mounting dimensions

Product discontinuation Model CS1W-MCH71	Recommended replacement Model NJ501-1400
Same with CS1 series	DIN rail

Dimensions

Product discontinuation Model CS1W-MCH71	Recommended replacement Model NJ501-1400
 <p>Dimensions of Model CS1W-MCH71: Height 130, Width 35, Depth 100.5, and another depth dimension 104.</p>	 <p>Dimensions of Model NJ501-1400: Height 90, Width 90, and depth dimensions 2.7 and 90.</p>

Specifications

Item	Product discontinuation Model CS1W-MCH71	Recommended replacement Model NJ501-1400
Power Supply Voltage	<ul style="list-style-type: none"> 5 VDC (from Backplane) 24 VDC (from external power supply) 	<ul style="list-style-type: none"> 100 to 240 VAC (external power supply) 24 VDC (external power supply)
Voltage fluctuation tolerance	<ul style="list-style-type: none"> 4.75 to 5.25 VDC (from Backplane) 21.6 to 26.4VDC (from external power supply) 	<ul style="list-style-type: none"> 85 to 264 VAC (AC power supply) 19.2 to 28.8 VDC (DC power supply)
Internal current consumption	5 VDC, 0.8 A max	5 VDC, 1.90 A max
Weight (Connectors excluded)	300g max	550g max (End cover included)
Safety standards	UL, CSA, C-TICK, EC compliant	cULus, EC compliant, NK, LR
Attitude	At 2,000m elevation or lower	At 2,000m elevation or lower
Controlled Devices	MECHATROLINK-II below supported <ul style="list-style-type: none"> SMARTSTEP Junior servo drive Various I/O unit (Yaskawa) 	EtherCAT below supported <ul style="list-style-type: none"> G5 series servo drive EtherCAT slaves
Program language	Dedicated motion control language	LD, ST (Ladder Diagram, Structured Text)
Control method	Position control, Speed control, Torque control	Position control, Speed control, Torque control
Baud rate	10 Mbps	100 Mbps
Number of controlled axes	32 axes max Physical axes: 30 axes max Virtual axes: 2 axes dedicated for virtual axes	64 axes/32 axes/16 axes Physical axes, Virtual axes, encoder axes, Virtual encoder axes
Control period	1, 2, 3, 4, 6, 8 ms	Primary task: 500 μs/1000 μs/2000 μs/4000 μs
Minimum setting unit	Pulse, mm, degree, inch	Pulse, mm, μm, nm, degree, inch

Features

Legend: o = Available x = Not available

Item	Product discontinuation Model CS1W-MCH71	Recommended replacement Model NJ501-1400
Linear interpolation	o 8 axes max	o 4 axes max/axes group
Circular interpolation	o 2 axes max	o 2 axes max/axes group
Time specified positioning	o	x
Target position change function	o	o
Interrupt feeding	o	o
Electronic Shaft	o	o
Travel distance super impose	o	o
Traverse function	o	x
Latch function	o	o
Link operation	o	o
Trailing synchronous operation	o	o
Speed command	o	o
Torque command	o	o
Override	o	o
Acceleration/deceleration curve	Trapezoidal or S-shape	Trapezoidal or S-shape
Origin search	o	o
Backlash compensation	o	o
Teaching	o	x
Arithmetic operation	o	o