NFCP501-W15 S2

STARDOM FCN-500 processor module

Controller logic, redundant SB-bus I/O, Ethernet and RS-232-C communications

PRODUCT SNAPSHOT

BRAND	**FAMILY**
Yokogawa	Yokogawa STARDOM FCN-500 autonomous contro
PART	**ORIGIN / HS**
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PRODUCT OVERVIEW

Controller logic, redundant SB-bus I/O, Ethernet and RS-232-C communications

1. Uses a 1.46 GHz Intel Atom processor
2. Supports duplex processor operation
3. Provides two gigabit-capable Ethernet ports
4. Coordinates redundant SB-bus field I/O

SYSTEM COMPONENTS

- FCN-500 base unit
- SB-bus I/O modules
- SDHC engineering card
- STARDOM engineering and network configuration

TECHNICAL NOTE

Verify NFCP501-W15 S2, processor operating mode, Ethernet addresses, serial parameters, SB-bus configuration, SDHC contents and battery condition before replacement; confirm duplex synchronization and all controller diagnostics after restart.

TECHNICAL DATA

PARAMETER	VALUE
CPU	Intel Atom E3815, 1.46 GHz
Style	S2
Main memory	256 MB with ECC
SRAM	2 MB with ECC, battery backed
Onboard flash	1 GB
SD card	SDHC 4 to 32 GB, Class 10
Ethernet ports	2 RJ45
Ethernet speed	10/100/1000 Mbit/s
Serial interface	RS-232-C, D-sub 9-pin male

PARAMETER	VALUE
Serial rate	Up to 115.2 kbit/s
Serial mode	Asynchronous, full- or half-duplex
I/O bus	Redundant SB bus
Diagnostics	Watchdog timer and temperature monitoring
Battery capacity	1000 mAh
Supply	5 V DC +/-5%
Current consumption	1200 mA maximum
Rack occupancy	2 slots
Duplex operation	Supported

ENGINEERING NOTE

Verify NFCP501-W15 S2, processor operating mode, Ethernet addresses, serial parameters, SB-bus configuration, SDHC contents and battery condition before replacement; confirm duplex synchronization and all controller diagnostics after restart.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
Siemens 6SL3352-6TE33-8AA3	Related industrial automation product	**View Siemens 6SL3352-6TE33-8AA3 page**
Siemens 6RY1803-0DA04	Related industrial automation product	**View Siemens 6RY1803-0DA04 page**
Siemens C98043-A7106-L4	Related industrial automation product	**View Siemens C98043-A7106-L4 page**
Bently Nevada 330180-90-CN	Related industrial automation product	**View Bently Nevada 330180-90-CN page**
Bently Nevada 330106-05-30-10-02-00	Related industrial automation product	**View Bently Nevada 330106-05-30-10-02-00 page**
Siemens 6RY1803-0DA03	Related industrial automation product	**View Siemens 6RY1803-0DA03 page**
Bently Nevada 330104-01-05-50-02-00	Related industrial automation product	**View Bently Nevada 330104-01-05-50-02-00 page**
Bently Nevada 330910-00-24-10-01-CN	Related industrial automation product	**View Bently Nevada 330910-00-24-10-01-CN page**

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Autonomous process control

Uses a 1.46 GHz Intel Atom processor

Remote utility station automation

Supports duplex processor operation

Redundant field control node

Provides two gigabit-capable Ethernet ports

FCN-500 processor renewal

Coordinates redundant SB-bus field I/O

PRODUCT PRECAUTIONS

1. Verify the complete NFCP501-W15 S2 marking and its assigned Yokogawa STARDOM FCN-500 autonomous controller position before work.
2. Place the connected autonomous process control process in the approved maintenance state.
3. Isolate applicable power and controller logic, redundant sb-bus i/o, ethernet and rs-232-c communications field energy before disconnecting conductors.
4. Record connector, conductor, address, firmware and software identities before removal.
5. Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.
6. Confirm the installed FCN-500 base unit and SB-bus I/O modules against the approved project.
7. Restore power in a controlled sequence and review device, network and host diagnostics.
8. Prove the intended remote utility station automation function and retain the final test result.

ENGINEER FAQ

Q1 Does NFCP501-W15 S2 match FCN-500 base unit in a Autonomous process control installation?

Verify the complete NFCP501-W15 S2 marking, the documented Yokogawa STARDOM FCN-500 autonomous controller position and the installed FCN-500 base unit before fitting the assembly.

Q2 How should NFCP501-W15 S2 be wired when it must uses a 1.46 ghz intel atom processor?

Isolate the circuit, identify every terminal and reproduce the approved polarity, shield and channel assignment for NFCP501-W15 S2; then continuity-test the affected path.

Q3 Which Yokogawa STARDOM FCN-500 autonomous controller records should be captured before removing NFCP501-W15 S2?

Record the as-found wiring, installed position, active configuration and diagnostic state associated with NFCP501-W15 S2 before disconnection.

Q4 What controlled test confirms that NFCP501-W15 S2 can supports duplex processor operation?

Apply the approved field or simulated stimulus, observe the Yokogawa STARDOM FCN-500 autonomous controller indication and confirm the intended response without bypassing the normal interlocks.

Q5 Which SB-bus I/O modules condition should be checked when NFCP501-W15 S2 reports an abnormal state?

Check the SB-bus I/O modules supply, seating and connection first, then compare channel diagnostics with the recorded NFCP501-W15 S2 baseline.

Q6 Can NFCP501-W15 S2 be moved directly into Remote utility station automation without validating STARDOM engineering and network configuration?

No. Confirm the STARDOM engineering and network configuration, revision, connection scheme and Yokogawa STARDOM FCN-500 autonomous controller configuration before transferring NFCP501-W15 S2 to that duty.

Q7 What maintenance evidence is required after NFCP501-W15 S2 is used for Redundant field control node?

Retain the nameplate record, corrective action, final diagnostics and a controlled redundant field control node functional-test result for NFCP501-W15 S2.

Q8 How should NFCP501-W15 S2 be returned to service in FCN-500 processor renewal?

Restore power under control, verify provides two gigabit-capable ethernet ports, exercise the intended signal path and release NFCP501-W15 S2 only after the Yokogawa STARDOM FCN-500 autonomous controller remains in its approved operating state.

SOURCE Yokogawa STARDOM FCN-500 technical information and general specification | TI 34P02A13-01E; BU 34P02A00-81

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