

FUJI PROGRAMMABLE CONTROLLER  
**FLEX-PC** NS SERIES  
CPU MODULEType NS-CPU-A32 /UL  
A64 /UL

Before using this CPU MODULE, be sure to read this OPERATING INSTRUCTIONS thoroughly to ensure proper operation. Make sure that the delivered unit conforms to your requirement, and also check for any missing or damaged parts. Please inform our sales office in the event of any abnormality.

[Accessories] The following accessories are supplied with this module.

Name	Number
OPERATING INSTRUCTIONS (This manual)	1
Battery cassette (N-BAT1/UL)	1
Operation mode select key	2

[Relevant manuals] Instruction manuals for system design, programming and maintenance are available on request from your nearest sales office.

FLEX-PC NS series <HARDWARE> : No. LEH926
FLEX-PC NS series <SOFTWARE> : No. LEH927

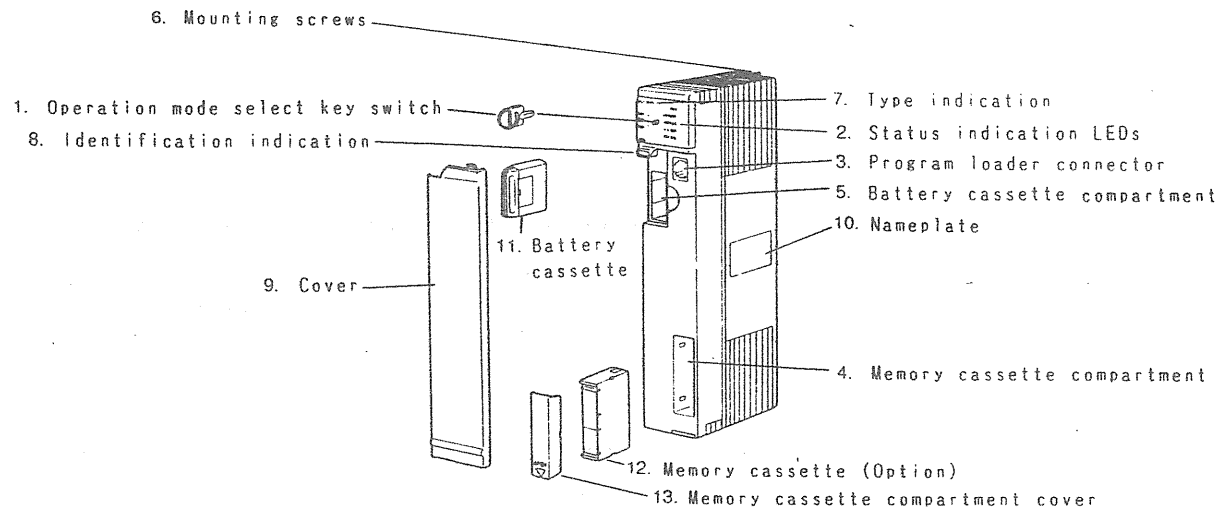
## Precautions

- For installation, wiring or maintenance, turn OFF the power in advance.
- This instrument is an electronic device. Do not install it on a panel with high-voltage devices or use the same power source as a device generating excessive noise.  
Failure to observe this precaution may result in a malfunction of the instrument.
- Do not use this unit under excessive vibration, harmful gases, dust and high temperature/humidity.
- This device is suitable for use in a 40°C maximum ambient temperature.

# 1. Outline

This module is the core of FLEX-PC NS series systems. It uses custom VLSI capable of ultra-high speed processing and a large memory capacity for easy application to a wide range of controls.

# 2. Names and Functions



### 1. Operating mode select key switch

This key switch is used to select operation mode.  
The following table shows the function of each mode.

Name	Mode	Function
RUN	Operation mode	<ul style="list-style-type: none"> <li>Under operation</li> <li>Stop instruction from program loader and program write are not accepted.</li> </ul>
TERM	Terminal mode	<ul style="list-style-type: none"> <li>Run/stop instruction from program loader and program write are possible.</li> </ul>
STOP	Stop mode	<ul style="list-style-type: none"> <li>Under stop</li> <li>Start instruction from program loader and program write are not accepted.</li> </ul>



The above figure shows RUN (operation) mode.

### 2. Status indication LEDs

These LEDs indicate the operating status of PC.

Symbol	Colour	Name	LED ON condition	Status of RUN contact in power module at LED ON
RUN	Green	Running	ON during normal operation	ON
ERR	Red	CPU error	Flicker or ON at occurrence of fatal/non-fatal fault	OFF/ON
	Red	Memory error	Flicker or ON at damage to memory	ON
	Red	I/O error	Flicker or ON at I/O module fault or abnormal setting	ON
BAT	Red	Battery error	ON at battery voltage drop or when battery is not mounted	ON

### 3. Program loader connector

This connector is used to connect the Handy loader (N-HLDO11E/UL).

4. Memory cassette compartment (memory cassette is optional. Type : N-M □□□□/UL)  
User program (EPROM, EEPROM) or debugging RAM is inserted into this compartment.  
The compartment is fitted with a cover prior to delivery.  
When mounting or removing the memory cassette, be sure to turn OFF the power supply module.  
If it is mounted or removed when the power is turned ON, a malfunction or damage to the memory data may occur.

5. Battery cassette compartment (battery cassette is supplied.)  
Battery cassette for RAM back-up is built-in to the CPU module. It is used to backup the memory data for approximately a half year under the condition of power failure (at 25°C ambient temperature).  
Replace with the same battery cassette only (N-BAT1/UL). Servicing of the circuitry involving the cells and replacement of the lithium cells should be performed by a trained technician or the equivalent.

6. Mounting screws  
These screws are used to mount CPU module on the base board.

7. Type identification  
CPU modules are abbreviated as follows.  
CPU-A32 ..... NS-CPU-A32/UL  
CPU-A64 ..... NS-CPU-A64/UL

8. Identification indication  
The type of module is indicated by colour.  
CPU module is indicated in white.

9. Cover

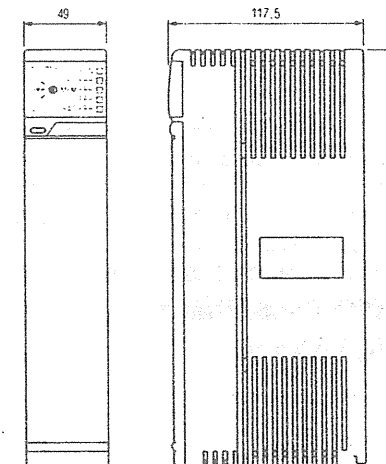
10. Name plate

11. Battery cassette (accessories)  
This battery is used to back-up RAM built-in the CPU module.  
(This is not built-in at shipment)

12. PROM cassette is available to store user program, and RAM cassette is available to store the data for debugging. When the memory cassette is mounted or removed, the power for the module (CPU module) should be turned OFF in advance (if it is mounted or removed while the power is turned ON, a malfunction or damage to the memory data may occur).

13. Memory cassette compartment cover  
When the memory cassette is not used, this cover should be mounted.

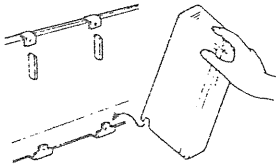
# 3. Outline Dimensions (in mm)



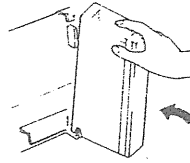
## 4. Mounting and Removal

The module should be mounted or removed as shown in the diagram printed on the base board.

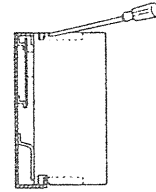
### 1. Mounting



Put on mounting boss.



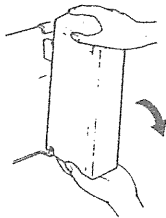
Insert into connector.



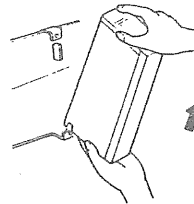
Mount the module using screws (M4×12) supplied with the module.

When mounting, put the module on the mounting boss of the base and insert it carefully into the connector. Do not allow unreasonable force to prevent the connector pin from being bent or the module from being damaged.

### 2. Removal



Remove mounting screw and pull the module in the direction of arrow.



Remove the module from the mounting boss by pulling it in the direction of arrow.

Note) At the completion of wiring work, the dust-proof seal should be removed from each module. If the module is energized without removing the seal, the internal temperature increases which affects the specified environmental characteristics.

Note : These OPERATING INSTRUCTIONS should be furnished to the maintenance supervisors of final users.

Caution : These OPERATING INSTRUCTIONS deals with main items on the unit. If you have questions, refer to the relevant catalogues or manuals, or contact our sales office.

The contents of this OPERATING INSTRUCTIONS are subject to change without prior notice.



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