

FANUC

Does your CNC have Fanuc FOCAS?

What is Fanuc FOCAS?

Fanuc FOCAS is a set of library files that can access almost all information inside the CNC control.

Typical Available Data:

- CNC Status (Running, Idle, Alarm)
- Part Count Information
- Program Details (Name, number, size, date modified)
- Spindle Load
- Positional Data
- Tool and Work Offsets
- Alarm Number and Text
- PMC Data
- Feed Overrides
- Modal Data

FOCAS is available on all Fanuc i-series controls, though on older versions it was typically an option. Below is a guide for controllers that are likely to have the option.

Uncommon	Good Chance (Option)	Standard
16i-a	16i-b	30i (all)
18i-a	18i-b	31i (all)
21i-a	21i-b	32i (all)
0i-a	160i (all)	300i (all)
	180i (all)	310i (all)
	210i (all)	320i (all)
	0i -b/c	0i-d

On your CNC control follow the steps below to confirm your machine has FOCAS:

1. On Fanuc 30i, 31i, 32i or 0i-d (including 300i, 310i, and 320i):

All 0i-d and 30i series controllers have embedded FOCAS. Your CNC machine supports a direct NATIVE connection to your FactoryWiz Monitoring system. You're done 😊

2. If you have a Fanuc 16i, 18i, 21i and 0i-b / 0i-c (including 160i, 180i, 210i), please continue to next step below. Please be aware that Fanuc 15i controllers (even with FOCAS) are not supported by FactoryWiz using a native connection.
3. Press **SYSTEM** button on the front panel until you arrive at the **parameter** screen.
4. Press the **right arrow button** in the row of soft-keys until you see **ETHPRM**. If you cycle through all of the options without seeing **ETHPRM** and get back to **PARAM**, then your CNC does NOT have an Ethernet interface.
5. If you do have **ETHPRM**, press **ETHPRM**.
 - If you have **EMBED** under **ETHPRM**, press **EMBED**
 - Standard TCP/IP parameters should be visible
 - Press Page Down key
 - FOCAS parameters should be visible
 - If you do not have **EMBED** under **ETHPRM** but do have **BOARD**, press **BOARD**
 - Standard TCP/IP parameters should be visible
 - Press Page Down key
 - If your Ethernet board supports FOCAS, then FOCAS parameters should be visible. If your Ethernet board is simply a **"data server"**, you will only see FTP host settings that **may be used for DNC data transfer**. In this case, the CNC is NOT capable of using FOCAS parameters for native machine monitoring
 - If you only find **PCMCIA** and not **EMBED** or **BOARD**, your CNC **does not have FOCAS installed**, but you may be **able to purchase the option** from your machine tool vendor.
 - If you successfully find **FOCAS** parameters **under the second page** of either **EMBED** or **BOARD**, your CNC machine supports a direct **NATIVE connection** to your FactoryWiz Monitoring system.

Mori Seiki Note:

If you have a Mori Seiki machine with a MAPPS controller, you will need to bring up the CNC's background parameter screen. Simply go to the **SYSTEM key** and look for the **NC SYSTEM button**. Then, follow directions under **step 4 above**.

If your **CNC does not allow use of the right-arrow** to page through these options then your CNC most likely **has a Mitsubishi controller** in the back end and you **will not be able to make use of FOCAS**.