Jetter automation

JetControl 440EXT
Industrial controller with flexible option model

Short description

The JetControl 440EXT controller offers high performance in a compact design. It is the optimum solution for CPU demanding and large applications. In conjunction with JetMove 1000/3000 servo amplifiers, it opens the door to Motion Control functionality. It allows for easy programming of axis groups and complex path control applications. Thanks to its flexible option model, the range of functions can be easily extended - even at a later date.

Features

- Supports up to 24 servo axes
- Up to 256 local I/Os
  (allows for expansion to > 65,000 distributed I/Os)
- 32 MB STX program/data memory
- 480,000 bytes of non-volatile memory
- 1x Ethernet port with integrated switch
- EtherCAT® (option)
- 2x CANopen®
- 1 serial interface
- 1x USB 2.0 (for storage media)
- Web server (option)
- E-mail client (option)
- Modbus TCP (option)
- OPC UA server (option)
- MQTT (option)
- Programming in STX - a high-level language to IEC-61131-3
- Multitasking
- File handling
- String processing

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Technical Data

	JC-440EXT
Non-volatile memory (NVRAM)	480,000 bytes (120,000 registers)
STX program/data memory (SDRAM)	32 MB
Flash disk	32 MB
Number of expansion modules	16 JX3 local expansion modules (remote expansion modules are supported)
Number of axes (MCX) (Motion Control/path control)	24 max.
Ports and interfaces	1 serial port (RS232/422/485) 1 EtherCAT® (option) 2 CANopen® 2 Ethernet ports (with integrated switch)
Expandability	JX3-IO modules, JM-1000/3000, JCF4 options
Realtime clock	Yes
Modbus TCP	Option
Rated input voltage	DC 24 V (-15 ... +20 %)
Input current	2.3 A @ DC 24 V
Dimensions (H x D x W)	approx. 131 x 100 x 75 mm
Degree of protection	IP20
Operating temperature	0 °C … +50 °C
Storage temperature	-40 °C … +70 °C
Air humidity	5 ... 95 %, non-condensing

Further details and order information are available on request. Specifications are subject to change without notice. Errors and omissions excepted.
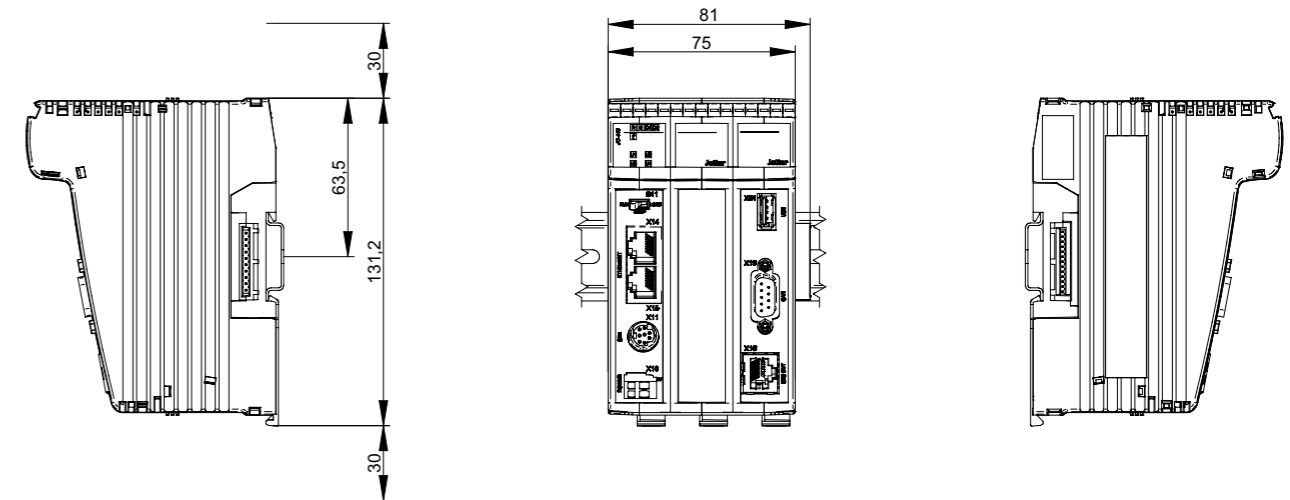
Ordering information

10001740 - JC-440EXT - JetControl controller basic hardware, expandable with options below

Item number	Order reference	Description
10001752	JCF4-C_ETH_(PRIM)	User-programmable Ethernet function
10001744	JCF4-C_ETHERCAT_MASTER	EtherCAT master (BN-EC, JM)
10001751	JCF4-C_FTP_CLIENT	FTP client file dispatch from STX
10001749	JCF4-C_HTTP	HTTP server (Web server)
10001748	JCF4-C_MODBUS/TCP	MODBUS/TCP client+server
10001753	JCF4-C_MQTT	MQTT client
10001747	JCF4-C_OPCUA_SERVER	OPC UA server
10001746	JCF4-C_OPCUA_CLIENT	OPCUA client
10001750	JCF4-C_SMTP	SMTP client (sending of e-mails)
10001741	JCF4-M_AX	1 physical axis (incl. PtP function)
10001743	JCF4-M_PATH	MCX path groups
10001757	JCF4-M_SV1	Software-based positioning function for 16 axes via JX3-IO modules
10001742	JCF4-M_TECHNO	MCX technology groups

Further details and order information are available on request.

All options can also be ordered subsequently. To do this, specify the serial number of the JC-440EXT when ordering. The options are activated by installing a license file

Dimensional drawing

Configuration example

You have an application with 4 axes (JM-1000 or 3000 servo amplifier) and you need Motion Control for technology functions (e.g. cam disk) and want to make operating data available to other devices via OPC UA.

For this, you need the following:
- 1 pc. 10001740 - JC-440EXT
- 1 pc. 10001744 - JCF4-C_ETHERCAT_MASTER
- 1 pc. 10001742 - JCF4-M_TECHNO
- 4 pcs. 10001741 - JCF4-M_AX
- 1 pc. 10001747 - JCF4-C_OPCUA_SERVER

Configuration aid

The JCF License Configurator supports you in configuring the options for the JC-440EXT.