



InfraCNC 3

Numerical control

Applications

Machine Tools
Special machines

Interfaces

2 x CANopen® Master
1 x EtherCAT® Master System
Serial communication

Connectivity

Digital and analog I/O's, Encoder inputs
PWM outputs

Softwares & tools

FASTware® software platform
Embedded tools for configuration & diagnosis

InfraCNC 3, general-purpose numerical control

InfraCNC 3 is a general-purpose 4 axes numerical control with a standard set of on-board analog and digital I/Os. It offers fully functional interfaces for two CANopen® and one EtherCAT® field buses. Additional axes (up to 64) and I/O devices can be added via dedicated on-board field bus controllers.

Main technical features

Processor unit

- Core: AMD G-Fusion T40E Dual Core @1.0GHz
- Graphic: ATI Radeon HD series built-in
- RAM: 2G bytes DDR3 SDRAM
- Cooling: passive heat sink, FAN less

Mass storage

- 16GB CFAST memory card
- 32 - 64GB industrial SSD 2.5" disk drive in option
- Up to 320GB Solid State disk in option

Display interface

- Up to 1920x1600, single-link DVI-D interface

Communication ports

- 1x LAN Gigabit Ethernet, RJ-45 (10/100/1000)
- 4x USB 2.0

Fieldbuses interfaces

- 2x 1Mbps CAN 2.0 A, RJ-45, CANopen® Master
- 1x 100Mbps EtherCAT®, RJ-45, Master

I/O processor

- ARM Cortex M3 series for I/O & fieldbuses control

Digital inputs

- 32x @4mA typ.
- Isolation: 2kV
- Filtering: debouncing & deglitching (by step of 250µs)

Digital outputs

- 16x @0.5A typ. /0.7A max.
- 8x @3A typ. /5A max.
- Isolation: 2kV
- Protection: overvoltage & short-circuit

PWM outputs

- 2x @10mA typ. (NPN)
- Isolation: 2kV
- Voltage: +3.0 .. +30.0V
- Resolution: 16-bit
- Period: 1kHz typ. (5kHz max.)

Analog inputs

- 4x unifilar or differential 0-10V or +/-10V
- Resolution: 12-bit

Analog outputs

- 6x unifilar 0-10V or +/-10V
- Resolution: 12-bit

Voltage reference

- 1x unifilar
- 10.000V +/-3mV @50mA max.

Encoder interfaces

- 4x 5V or 24V, unifilar type PNP/NPN or differential)
- 500kHz (unifilar), 5MHz (differential)
- Encoder supply 5V 1A

Serial communication

- 1x RS-232/RS-485, D-sub 9 male
- Baudrate 115kbps

Power supply

- Logic: 24Vdc @0.4A typ.
- I/O: 24Vdc @20A max.

Softwares, tools & accessories

FASTware® software platform

- FwSysDev: hardware definition, PLC programming
- FwCNCComponents: oriented object package for building motion control application

Embedded tools

- FwAxesCfg: axes parameters configuration & axes monitoring tools
- FwIOConfig: I/O mapping & CANopen & EtherCAT® networks configuration
- FwTracer: PLC & events tracer

Accessories

- Touch-screen consoles
- CANopen® or EtherCAT® I/O modules

The numerical control InfraCNC 3 in association with Infranor drive & motor ranges is able to solving the most complex applications in the most varied fields. Our solutions are based on extensive product and application know-how, engineering skills, sourcing, in-house flexible manufacturing and are tailored to our customer's needs. We implement strategic system solutions in collaboration with our customers.

Applications examples

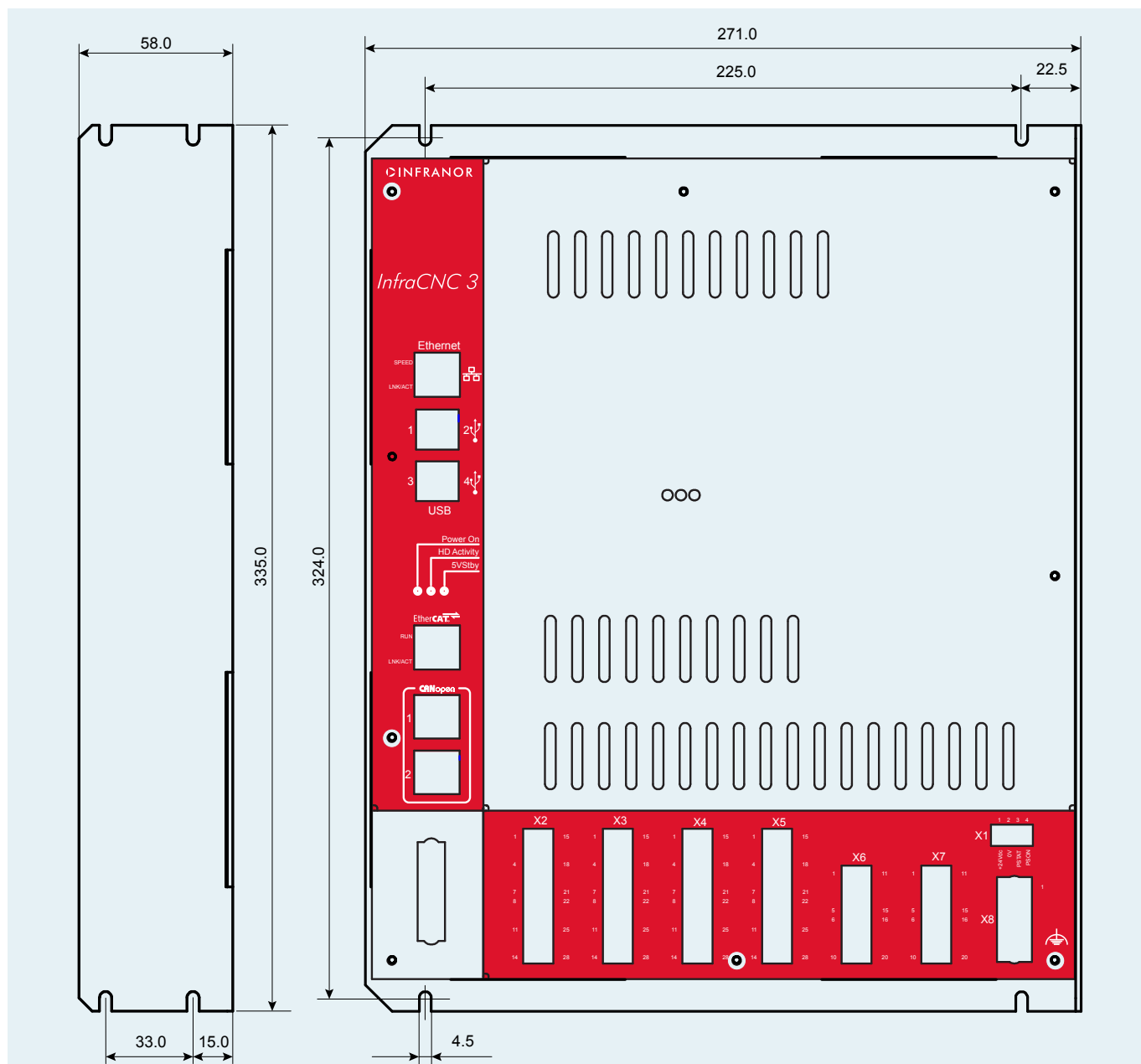
Machine Tools

- 3-axis, 5-axis multi-process machining center (milling-turning)
- Multi-spindle turning machines 12 axis (multi-CNC channels)
- Engraving machines
- Grinding machines

Special machines

- High accuracy laser micromachining
- Parallel kinematics machines (Stewart, Delta)
- Finish turning machine for piston rings
- 3D printers, bio-printers & fluid dispensers

Dimensions [mm]



Infranor Product Range

Drives

Standard drives



Customized drives



Drive applications



Motors

Standard motors



Customized motors



Motor applications

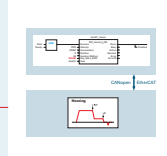


Services

Standard services



User-specific services



Global solutions

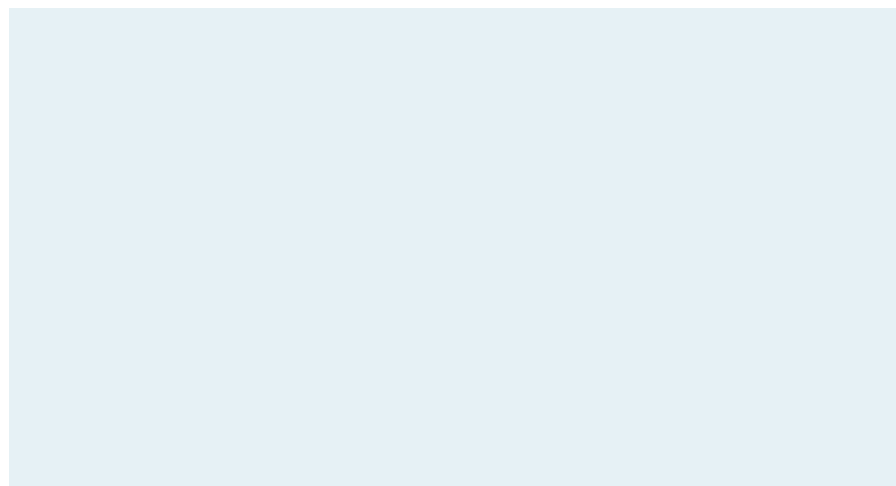


Infranor Group

Infranor creates added value for its customers by providing tailor-made motion solutions.

Based on strong working relationships, Infranor offers extensive market know-how, comprehensive engineering skills and a wide range of high-quality products leading to productivity gains and therefore to comparative advantages for its customers in their respective markets.

Contact



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Italy
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China

Other representations:
Denmark, Poland, Slovenia,
Israel, India.



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