

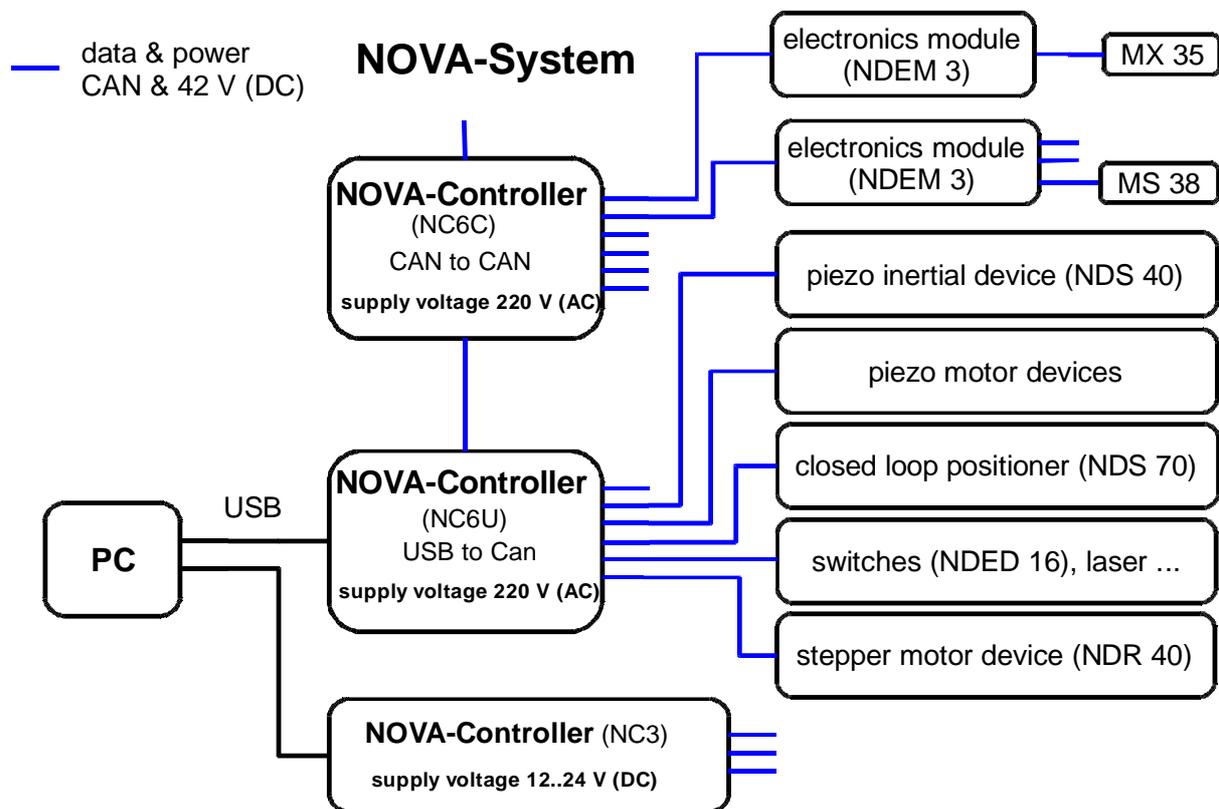
With the new Nova-Series you get a really in **NOVA**tive new controller system which is developed both for use in university labs and for industrial uses.

The NOVA controller gives you the possibility to drive different positioning devices – piezo inertial drives (with or without integrated electronic circuits), dynamic piezo motors, stepper motor drives with integrated electronic circuits and switches or something equivalent at one PC.

The system is based on the industrial CAN – Bus which supplies both the needed power and the controlling data to the end devices. These end devices has either to be intelligent (with own electronic circuits) or a special controller device is needed, especially to connect the former piezo inertial drives as MS 30/38, MX 25/35 stages and so on.

The NOVA system gives you also the possibility to connect additional controllers via the CAN to CAN controller together. This gives you the advantage to upgrade the number of the end devices which are controlled by one PC to fit your requirements.

The following sketch shows the connection possibilities of the NOVA system.



For this new NOVA System we have developed the first linear positioning devices with piezo inertial drives and integrated electronic circuit.

The NDS 40 is an open loop stage with 11 mm in travel and the NDS 70 stage is a closed loop stage with integrated linear measuring system with 15 mm in travel and a resolution of up to 50 nm.

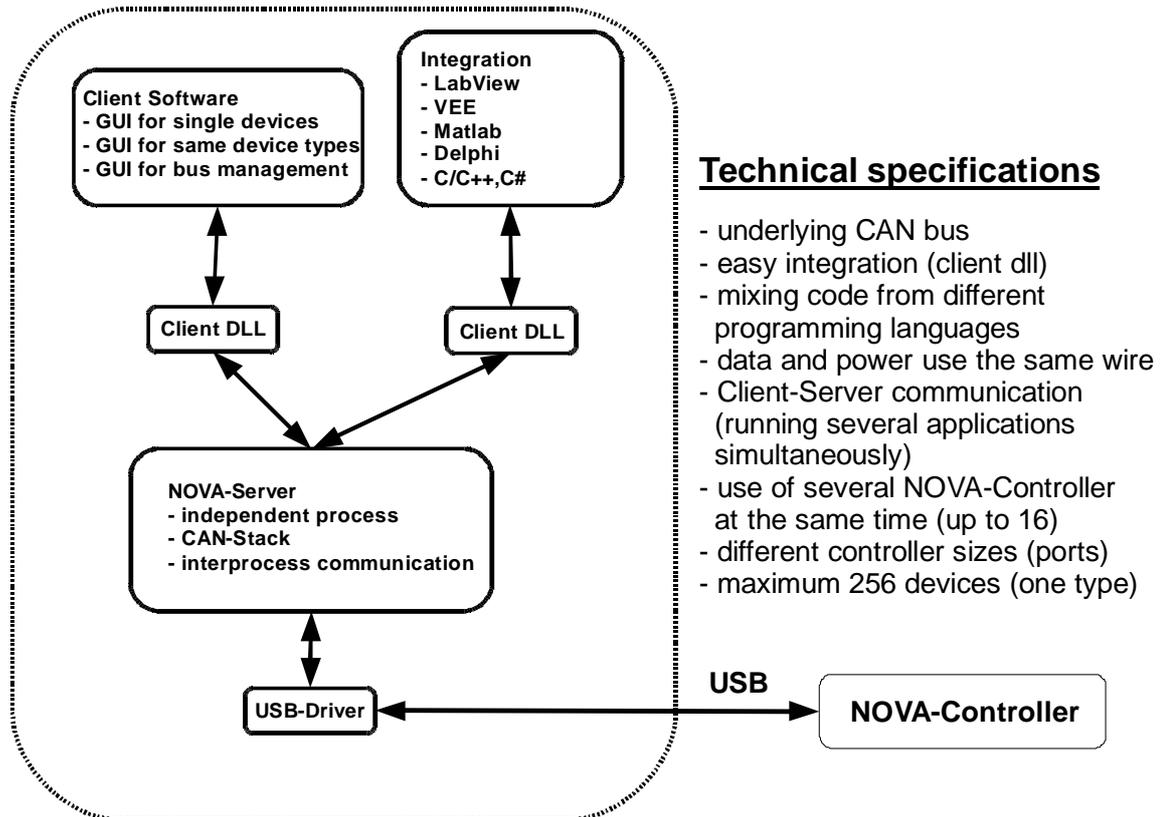
The following devices will be developed in the near future:

NDR 40 – Rotary stage with stepping motor

NDED 16 – switches for optical parts

Devices to control lasers and other parts in your optical assembly

The following sketch shows you the driving possibilities and the stack based server client architecture of the NOVA System.



Technical specifications

- underlying CAN bus
- easy integration (client dll)
- mixing code from different programming languages
- data and power use the same wire
- Client-Server communication (running several applications simultaneously)
- use of several NOVA-Controller at the same time (up to 16)
- different controller sizes (ports)
- maximum 256 devices (one type)

For integration in your software environment we offer a wide range of interfaces as LabView, MatLab, VEE, Delphi and C/C++/C#.

Nova

USB-Controller for Nova Devices



Technical Data

Power supply: portable power supply
 in: 100 – 240 V
 out: 12 - 24 VDC with user-plug
 or
 220 V (AC)

Interface (host): Via USB 2.0 (Full speed)

Interface (client): USB to CAN bus

Connections: Stages: RJ 45 (8pin)
 PC: USB Type B socket (USB 2.0)

Software for PC
 - for Win XP and Vista (32 bit):
 Executable software with GUI

- for use with own programs:
 LabView, MatLab, VEE, Delphi and
 C/C++/C#

Mass: about 195 g (3 axes)
 about 500 g (6 axes)

Dimensions:
 3 axes 118 x 86 x 26 mm (L x W x H)
 6 axes 124 x 170 x 55 mm (L x W x H)

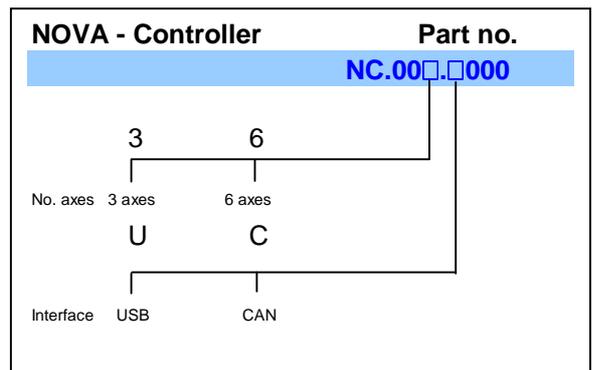
Delivery includes: USB connecting cable (CK.030.USB0)
 Power supply (for 3 axes)

Specifications

- CAN-based USB-controller for piezo inertial, stepping motor and dynamical piezo motor devices
- Several controllers for different numbers of end devices available
- Possibility of easy connection for additional controllers
- Drivers for many operating systems

Application Examples

- Micro-/Nano Technology
- Bio Technology
- Microscopy
- Quality Control
- Metrology
- R & D



Technical Data

Power supply: via CAN – Bus from NOVA controller

Connections to:

controller:

Erni SRCA (8pin)

stages:

Erni SRCA(4pin) open loop

Erni SRCA(12pin) closed loop

Step modes: 1/ 64 step

Mass: about 50 g

Dimensions: 72 x 50 x 22 mm (L x W x H)

Specifications

- CAN-based controller for piezo inertial devices
- Open or closed loop controllers available
- Possibility of easy connection of former piezo inertial devices as MS 30/38, MX 25/35 or MT 25

Application Examples

- Micro-/Nano Technology
- Bio Technology
- Microscopy
- Quality Control
- Metrology
- R & D

