

LucidControl - The reliable solution for data acquisition and control



LucidControl

The modules of the LucidControl product family turn your computer into a powerful data acquisition, monitoring and control system.

LucidControl input modules process digital and analog signals. They are able to measure voltages, currents, temperatures, resistances as well as digital on/off signals.

The output modules can switch power loads and generate digital and analog signals.

All LucidControl IO modules are power supplied by the USB connection. There is no external power supply necessary.

Features of LucidControl

- ✓ Input / Output of analog and digital signals
- ✓ Easy installation and operation
- ✓ Various applications
 - Home automation
 - Energy management
 - Industrial automation
 - Process control
 - Prototyping
 - Education
- ✓ Assembly on in switch cabinet (DIN-Rail)
- ✓ Plugable IO terminals

- ✓ Comprehensive software support

Libraries for .NET, Java und Python

Examples

- ✓ Compatible with Windows XP and higher
- ✓ Compatible with Linux
- ✓ Operate with Raspberry Pi® and Beagle Bone
- ✓ Competent support
- ✓ Customized applications
- ✓ Made in Germany

Advantages with LucidControl

Comprehensive IO solution

LucidControl USB IO modules are available with various options and cover many applications.

Simple set up

Installation of LucidControl USB IO modules is very straightforward. There are no drivers necessary, because operating system inherent drivers are used.

Professional solution for industrial automation

LucidControl USB IO modules come with reliable industrial IO terminal connectors and they can be mounted on DIN-Rails inside of switch cabinets.

Remote control and acquisition

The LucidControl API can access LucidControl USB IO modules connected to a network.

Support and customer specific applications

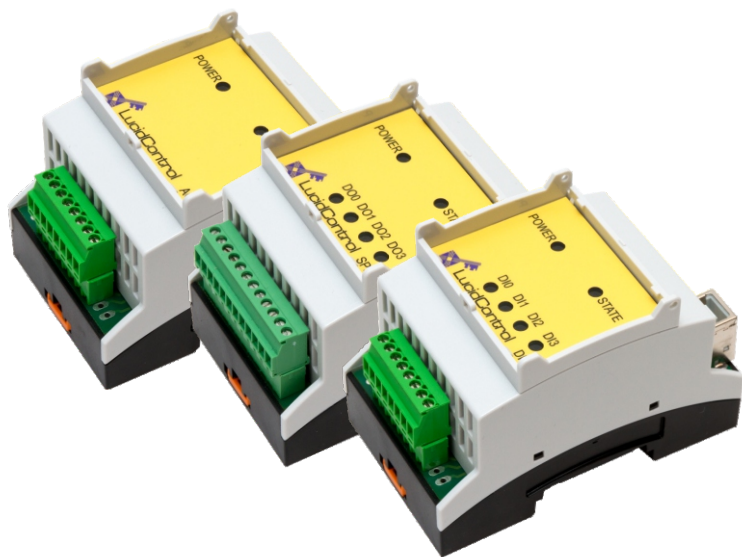
The modular hardware and software concept allows us to develop customized solutions based on LucidControl.

A summary of all available standard modules can be found on the backside of this paper.

Do you have special requirements? Please contact us.



Technical Properties



Dimension w / h / d	54 / 90 / 62mm
Operation temperature	0 - 60°C
Protection class	IP20
Interface	USB 2.0
Input / Output	8 / 12 way. pluggable terminal

Digital			
	Input DI4-I / DI8-I	Output DO4 / DO8	Output DO4-S
Function	Processing of digital signals	Digital outputs with Solid-State-Relays	Digital outputs with mechanical relays
Application	Acquisition of states and pulses	Control of electronic loads and signals	Control of signals (analog and digital)
No. channels	4 / 8	4 / 8	4
Galvanic Insulation	✓	✓	✓
Potential free	✓	✓	✓
Levels	5V / 10V / 24V	max. 30V / 0.75A	max. 30V / 0.75A
LED state indication	✓	✓	✓
Options	Counter, edges detection, filters	PWM and timers	

Analog			
	Input AI4	Output AO4	Temperature RI4 / RI8
Function	Acquisition of voltages and currents	Generation of voltages and currents	Acquisition of temperatures
Application	0 - 10V and 4 - 20mA interface	0 - 10V and 4 - 20mA interface	Acquisition of Pt100 und Pt1000 RTD sensors
No. channels	4	4	4 / 8
Range	0 - 5V / 0 - 10V / 0 - 24V ±10V 0 - 20mA	0 - 5V / 0 - 10V / ±10V 0 - 20mA / 4 - 20mA	±180°C (Pt100/Pt1000) 0-360°C (Pt1000)
Resolution	14 Bit	12 Bit	14 Bit
Accuracy	±0.25% typ.	±0.25% typ.	±0.5°C typ.
Options	Averaging, oversampling		Averaging, oversampling

Further information can be found on our web site <https://www.lucid-control.com>

