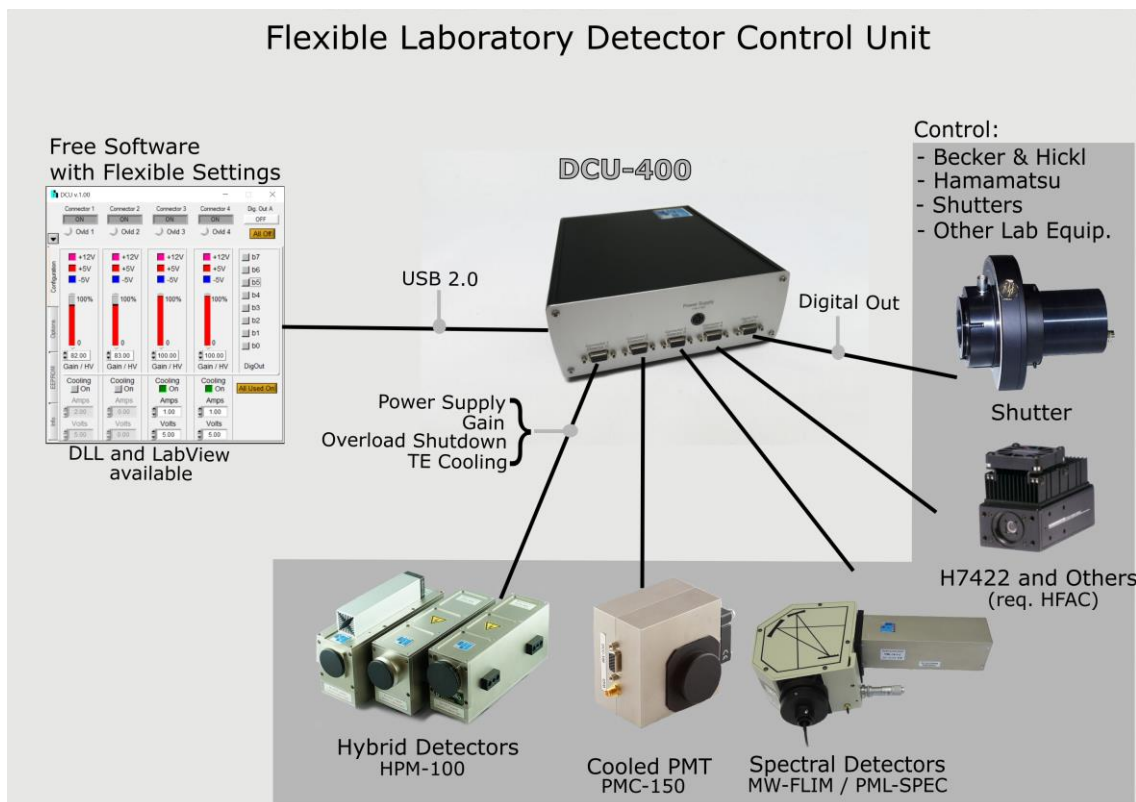




DCU-400 / DCU-800

Detector Control Unit

- Controls up to 4 / 8 detectors or lasers
- Power supply, gain control and overload shutdown for up to 4 / 8 detectors
- USB interface
- Additional high current digital output for shutter and filter control
- Overload protection of detectors in conjunction with bh HFAC-26 Preamps
- Full operation of Hamamatsu H7422 modules
- Software for Windows Vista/7/8/10
- Simple +19 V power supply
- Compatible with all bh TCSPC devices



Designed and manufactured by



Becker & Hickl GmbH
Nunsdorfer Ring 7-9
12277 Berlin, Berlin
Tel. +49 / 30 / 212 80 02-0
Fax. +49 / 30 / 212 80 02-13
email: info@becker-hickl.com
www.becker-hickl.com



DCU-400 / DCU-800

DCU-400 controls up to 4 detectors with an additional digital output for shutter and filter control.
DCU-800 controls up to 8 detectors with two additional digital outputs for shutter and filter control.

Power Supply Outputs (All Connectors)

Max. Current at +12 V	100 mA
Short Circuit Current +12 V	50 mA ¹⁾
Time from /OVL D to disable +12V	10 ms ²⁾
Output current in disabled state, +12 V	< 0.5 mA
Max. Current at +5 V	200 mA
Short Circuit Current +5 V	60 mA ¹⁾
Output current in disabled state, +5 V	< 0.5 mA
Max. Current at -5 V	200 mA
Short Circuit Current -5 V	60 mA ¹⁾
Output current in disabled state, -5 V	< 0.5 mA
Max. Current at -12 V	Sum 120 mA, single output 60 mA
Short Circuit Current -12 V	No short protection. Don't short longer than 1s

¹⁾ Foldback Characteristics, don't short several outputs simultaneously for more than 20 s

²⁾ Connectors 1 - 4 / 1 - 8 only. 250 Ω load, time from +12 V to +6 V output voltage.

Detector Gain Control (Connectors 1-4 / 1-8)

Resolution	12 bit
Voltage Range Pin 12	0 to +10 V
Load at Pin 12	min. 1 kΩ
Output Resistance at Pin 12	100 Ω
Voltage Range Pin 13	0 to +0.9 V
Load at Pin 13	min. 1 kΩ
Output Resistance at Pin 13	100 Ω
Output Time Constant	100 ms

Overload Shutdown

Overload inputs at connector 1 - 4 / 1 - 8	TTL, active Low, Pull-up resistor 10 kΩ
Overload Reset	By Software and at Power-ON

High Current Switches (Additional Digital Out / Digital Output A + B)

Typical 'On' Resistance, 25°C	70 mΩ
Max. Switch Current, Single Switch	2 A
Max. Switch Current, Sum of all Switches	5 A ³⁾
Max. turn-off Voltage at Switch	20 V
Turn-on and turn-off transition time, Load 10 Ω	100 ns
Disable Transition Time	< 1 us
Time from /OVL D to Disable	< 2 us

³⁾ Both GND pins used

Supply for Thermoelectric Coolers (Connector 1-4 / 1-8)

Output Voltage	0 to 5 V
Output Current	0 to 2 A
Resolution of Output Voltage and Current	12 bit
Output Resistance	0.4 Ω ⁴⁾
Output Capacitance	300 uF
Output Ripple	< 5 mV

⁴⁾ All pins parallel

General

Dimensions	264 mm x 205 mm x 75 mm
Interface / Connector	USB 2.0 / 2x USB 2.0
Power Supply	+ 19 V DC

International Sales Representatives



US: Boston Electronics Corp
tcspec@boselec.com
www.boselec.com



UK: Photonic Solutions PLC
sales@psplc.com
www.psplc.com



グローバルにネットワークを広げ、最先端の科学をお客様に提供 URL: <https://www.tokyoinst.co.jp> Mail: sales@tokyoinst.co.jp



超高真空・極低温走査型プローブ顕微鏡
高速分光測定装置、クライオスタット



Nd:YAGレーザー、Ti:Sレーザー
OPOレーザー

●本カタログに記載されている内容は、改良のため予告無く変更する場合があります。(製品の仕様、性能、価格などはカタログ発行当時のものです)
●本カタログに記載されている内容の一部または全部を無断で転載することは禁止されています。
●本カタログに記載されているメーカー名、製品名などは各社の商標または登録商標です。