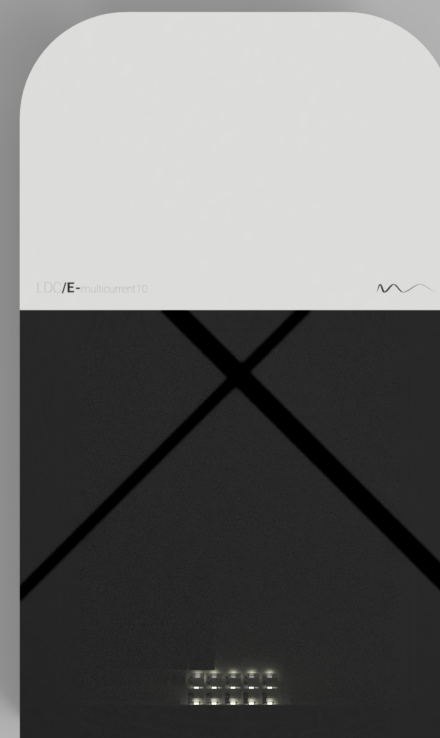


luzwavelabs

LDC/E-multicurrent10

10-channel, 300 mA current source up to 20V compliance voltage with
PDs monitoring for PIC testing



luzwavelabs

LDC/E-multicurrent10
V202007

All product specifications are subject to change without prior notice

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STATE-OF-THE-ART PERFORMANCE FOR **PIC TESTING**

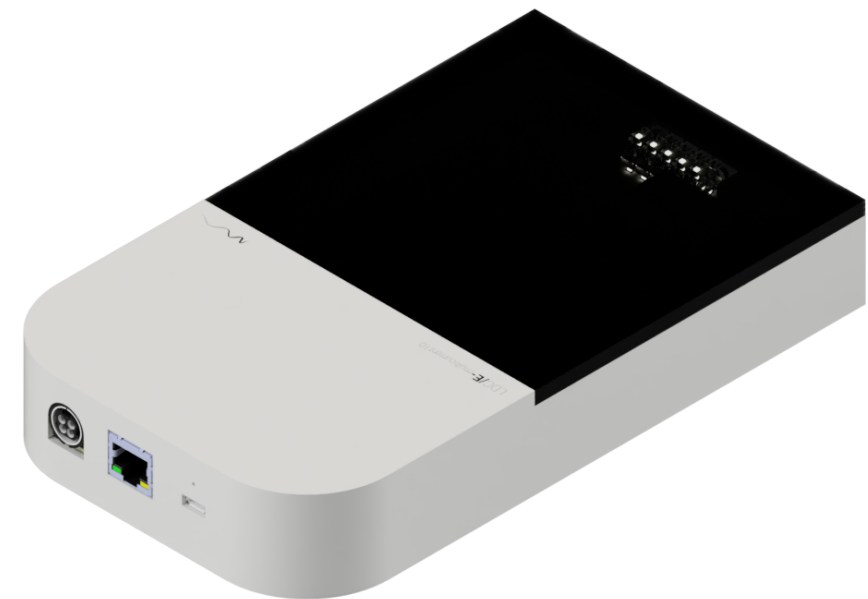
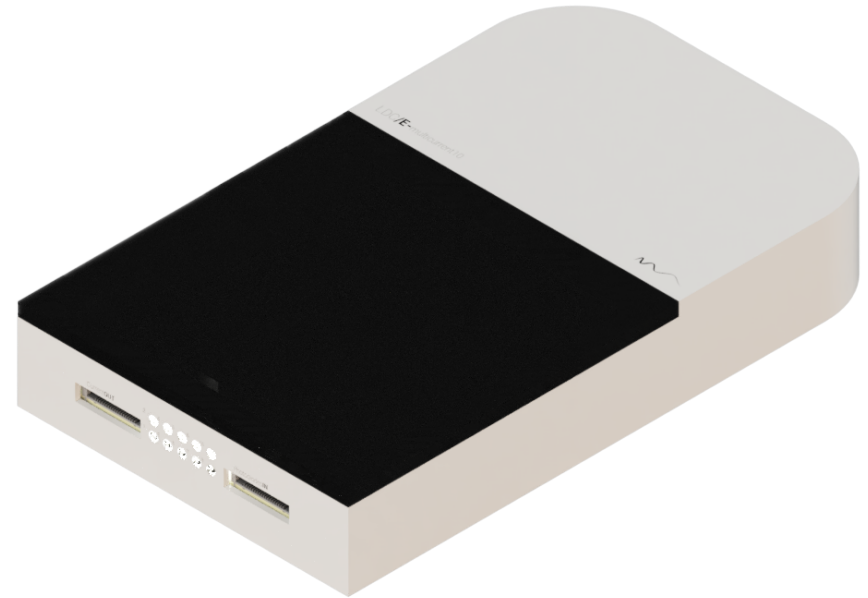
MAIN FEATURES

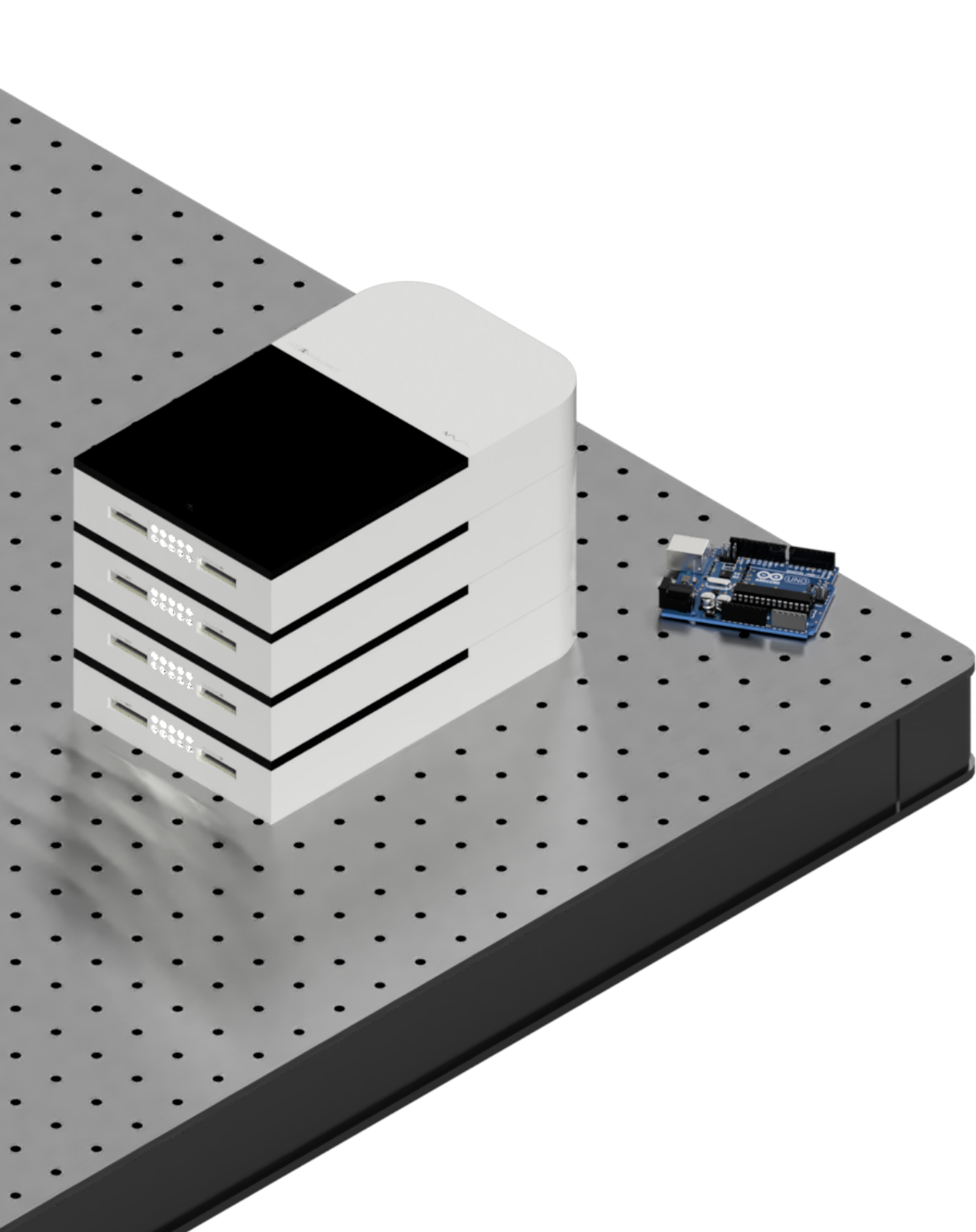
10x INDEPENDENT CURRENT SOURCES

- ✦ Up to 300 mA maximum current per channel
- ✦ Independent channel control
- ✦ Compliance voltage adjusted dynamically (5V to 20V) to drive all kinds of loads from lasers, SOAs, modulators to heaters, and high voltage lasers.
- ✦ Output compatible with cathode-grounded laser diodes. All outputs share cathode terminal
- ✦ High stability and excellent noise performance
- ✦ Dynamic span adaptation (25, 100, 300 mA)
- ✦ 16 bit resolution
- ✦ SAMTEC microcoaxial output for high performance, high density and low cost external connections

10x PHOTODIODE MEASUREMENT

- ✦ Type A-B or Type C compatibility (defined at factory)
- ✦ High resolution measurement (>20 bits)
- ✦ Programmable internal amplifiers for different photodiode response (defined at factory)
- ✦ High speed readout for PI and VI curves
- ✦ SAMTEC microcoaxial input for high performance, high density and low cost external connections





UNIQUE AND SMART **DESIGN**

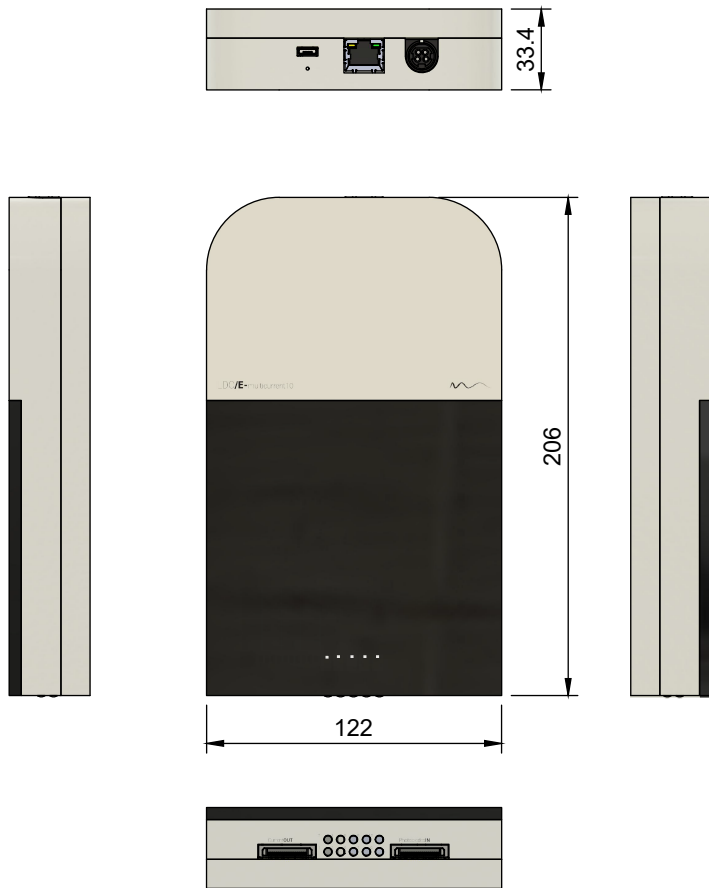
SMART AND BEAUTIFUL DESIGN FOR BEST USER EXPERIENCE

- + Unique compact design
- + Integrated magnets for optical table attachment
- + Integrated magnets for easy stack-up with other LDC-E modules

CONTINUOUS FUNCTIONALITY UPDATE OVER-THE-AIR

- + Wifi, Ethernet and USB connectivity
- + OTA updates with continuous improvements and added functionality

TECHNICAL SPECIFICATIONS



Dimensions in mm

CURRENT SOURCE	
Output current	
Channels	10
Current range	0-300 mA
Current output span	Dynamic adaptation 25 mA, 100 mA, 300 mA
Maximum output voltage	5 V to 20 V, adjusted dynamically
Current resolution	16 bits over the selected span 0.4 μ A (25 mA span) 1.5 μ A (100 mA span) 4.5 μ A (300 mA span)
Current noise density	Below 10 nA/rHz from 1 kHz (150 mA output current)
Control mode	Independent control per channel
Output polarity	All the cathodes are connected among them. Compatible with Cathode Grounded lasers. Contact us for Anode Grounded compatibility.
Protection features	
Current limit	User selectable to any value in the selected range
ESD protection	Output relay for each channel, anode and cathode are connected together in DISABLE channel state, Stand-by state and non-powered system state.
Open output and short-circuit detection	
Output monitoring	
Current measurement resolution	>20 bits
Voltage measurement range	0 V - 20 V
Voltage measurement resolution	>20 bits
PHOTODIODE MEASUREMENT	
Compatibility	Type A-B or Type C (defined at factory)
Resolution	>20 bits
Programmable Gain Amplifiers	Several user-selectable gains for different PD responses
CONNECTIVITY	
User Interfaces	Micro-USB, Ethernet, Wi-Fi
Updates	Over-The-Air (OTA) updates
Control software	Windows application. Web-based, multiplatform interface soon.
Inter-connectivity with other LDC/E devices	Interoperability between LDC/E series systems.
POWER	
Power input	24 VDC, 8 A maximum
Power connector	4pin DIN. ACDC external power adapter included
GENERAL & OTHER	
Dimensions	122x206x33.4 mm
Weight	TBD
Operating temperature	0 to 40 °C
Storage temperature	-40 to 70 °C
On board temperature monitoring	
Custom connector interface boards	available under request