

SPECIFICATIONS

INDICATOR	XDAC		
	MUB	U	DIFF
Voltage & Current Resolution	16-bit	16-bit	16-bit
Output	Bipolar	Unipolar	Differential
Output Range	±16 V ±500 mA	0–34 V 0–300 mA	±18 V ±500 mA
Intuitive GUI	Yes	Yes	Yes
SCPI command support (Python, C#, Matlab, and Labview)	Yes	Yes	Yes
Sharing Ground	Yes	Yes	No
Premium Range	±2.5 V ±5 V ±10 V	0–5 V, 0–10 V, 0–20 V, 0–200 mA, 0–100 mA, 0–50 mA	±2.5 V ±5 V ±10 V
Processor	Quad Core Cortex 64-bit ARM v8		
Port	Ethernet		

We are also open for **custom requirement** for your needs.

PRODUCT DIMENSIONS



	XDAC-U			XDAC-MUB			XDAC-DIFF	
	8	40	120	8	40	120	8	40
Number of Channels	8	40	120	8	40	120	8	40
W (mm)	106	232	232	106	232	232	141	232
L (mm)	164+38 (Front Board)	333	450	187+35 (Front Board)	333	450	187+35 (Front Board)	450
H (mm)	61.1	102	102	91	102	102	91	102



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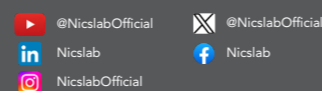
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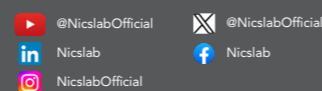
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We also available at :



Visit us on :



nicslab

XDAC[®]

MULTICHANNEL SOURCE MEASUREMENT UNIT



PRODUCT

See more details on:
www.nicslab.com



VARIED OUTPUT

Available in various channel outputs :

4, 8, 40, 80, 120, 1000+

Featured in various of output system options :

Unipolar, Bipolar, & Differential output

MULTI-PLATFORM

Compatible with many operating systems :

Windows, MacOS, & Linux

Programmable code via SCPI, support multiple programming languages :

Python, C#, Matlab, & LabVIEW

INTEGRATED OPERATION

Stackable with other types of XDAC

XDAC-U, XDAC-MUB, & XDAC-DIFF

Featured in various control system with just only a single software.

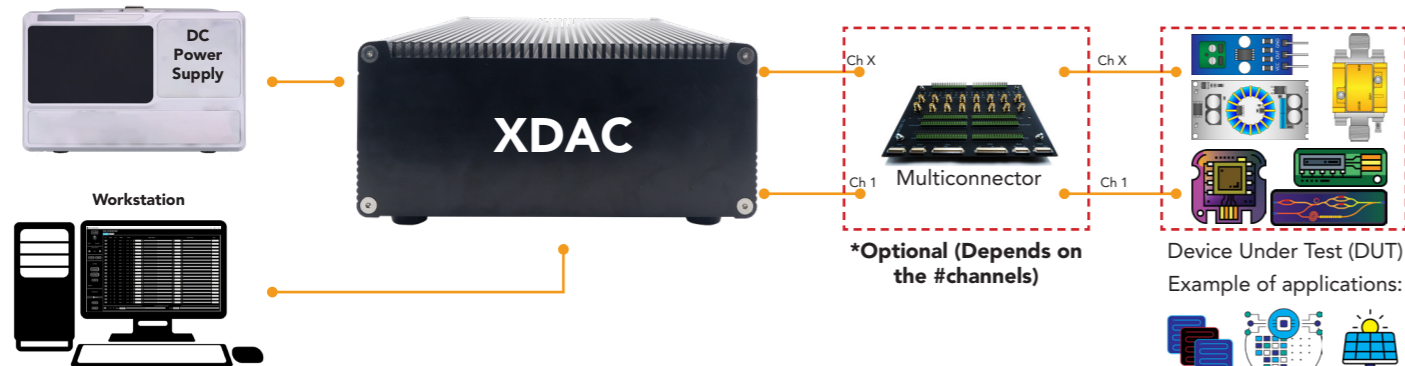
Dec-2025



20X MORE COMPACT, 3X COST EFFICIENT AND SCALABLE UP TO 1000+

XDAC®

HOW TO USE XDAC ?

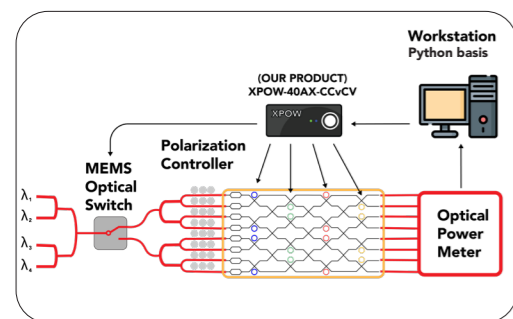


- DC power supply required depends on the type of XPOW/XDAC.
- For **unipolar (U)**, the maximum DC input voltage is 36 V.
 - For **bipolar (B)**, the maximum DC input voltage is ± 18 V.
 - For **differential (DIFF)**, the maximum DC input voltage is ± 12 V.

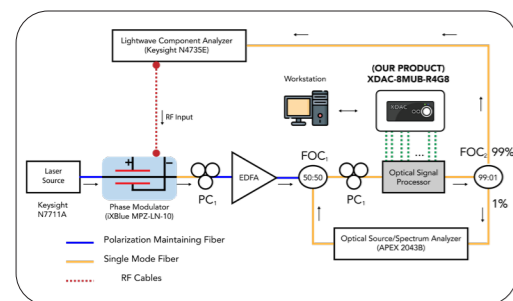
Typical minimum current for power up is ~ 3 A, depending on the channel density.

USE CASES

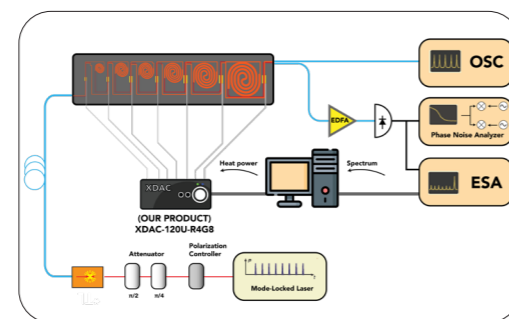
Deep Learning Accelerator
AIST & University of Tokyo



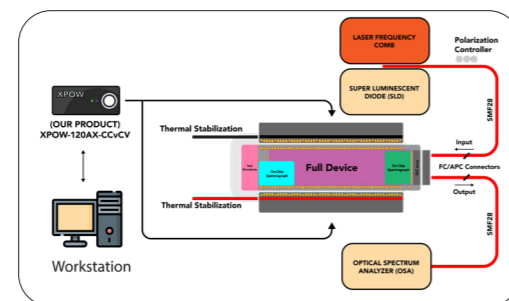
Photonic Based RF Filter for 5G
IIT Madras



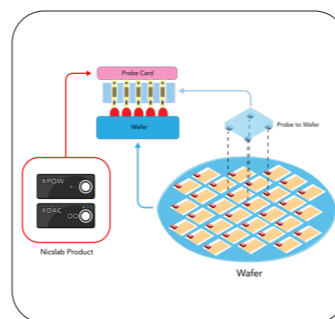
Aerospace & Communication
EPFL



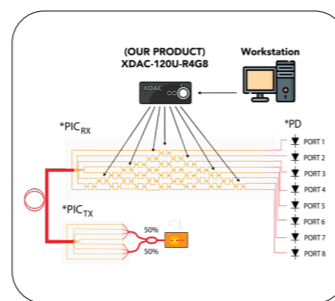
Spectrograph for Exoplanet Exploration
NASA & Caltech



Photonic Wafer Testing



Fiber Optic Transceivers
The University of Hongkong



SOFTWARE FEATURES

- | | | | | |
|----------------|---|------------------|--|--|
| Basic Features | <ul style="list-style-type: none"> • Slider • Enable SCPI Command • Voltage Reading • Current Reading | Premium Features | <ul style="list-style-type: none"> • Basic Features + • Notes • Lock • Save & Load • Record | <ul style="list-style-type: none"> • Sequence • Programming Template • Range Span Configuration • Settings (Voltage & Current Limit, Voltage Range, Reading Speed) |
|----------------|---|------------------|--|--|

Scan the QR-code in the cover page for the highlight of XDAC's software.

TESTIMONIES

" This product is incredibly convenient and straightforward. We especially appreciate the realtime voltage display alongside set values in the GUI, the efficiency of ribbon cable connections for swift board/chip swapping, and compatibility with Python for parameter setting and querying

Gregory P. Sercel & Nemanja Jovanovic Ph.D
Caltech/JPL NASA

" I appreciate the Python API, the seamless plug-and-play functionality, ease of use, reliability, and quality - reasons why I've chosen to use it for several projects.

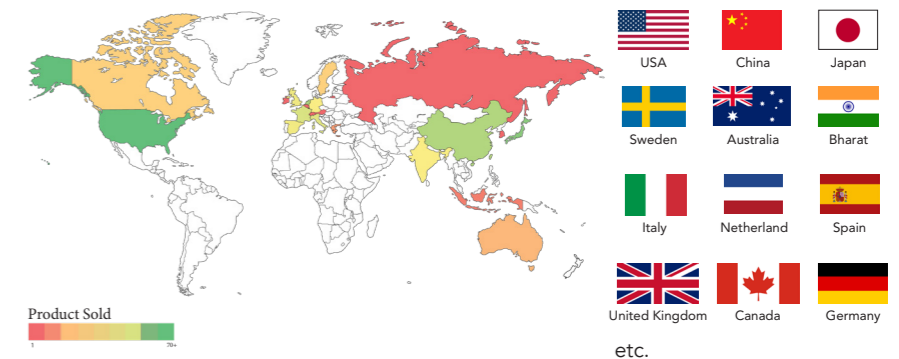
Kees Franken,
Fellow in Applied Physics, Harvard University

" I use a 3-channel XPOW as bias controller for an IQ optical modulator and it works wonderfully. Because XPOW is so compact, I can package it in the same box as my modulator. The software user interface is simple yet so good and intuitive. These features are critical for me in the device prototyping project I have with a few defense contractors in the US. I ended up purchasing a couple of XPOW units and shipping them to these contractors together with the prototype. It is definitely a powerful solution for the control of optical modulators.

Dr. David Marpaung,
Professor at University of Twente

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