

# PZ2130A and PZ2131A 5-ch Precision Source/Measure Unit

Precision SMU Modules for PZ2100A SMU Mainframe

**High Channel Density SMU Having 5 ch/Module and Saving Space at a Low Cost per Channel for a Wide Range of Applications Requiring Numerous Precision Power Supplies**

## Key features

- High channel density (20 Ch in 1U rack height, full width at max.) at low cost/ch for multi-ch applications (>4 ch)
- Narrow pulse down to 100  $\mu$ s pulse width & fast Digitizer Mode with sampling rate at 500 kSa/s (PZ2131A)
- Low voltage source noise down to 25  $\mu$ Vrms with low noise filter
- Wide dynamic range with seamless current measurement ranging

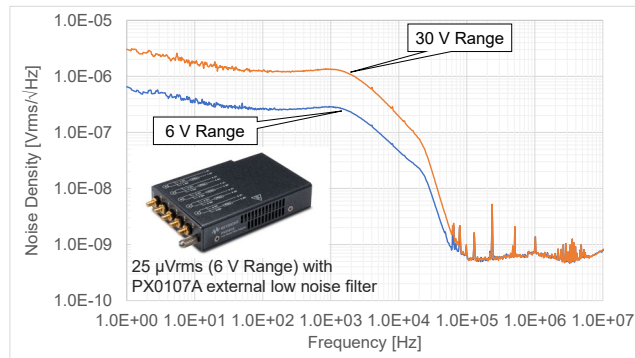
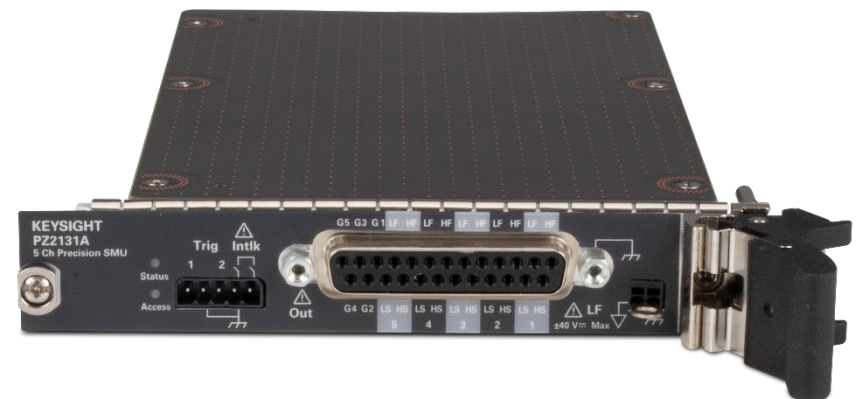


Figure 1. Noise Density with Keysight PX0107A Low Noise Filter Adapter

## Typical applications

- Optical devices (laser diodes, photodiodes, LEDs, etc.)
- Optoelectronic components (ITLA, CDM, ICR, IC-TROSA, etc.)
- Silicon photonics
- Integrated circuit (IC) design verification tests/function tests (RF PA/FEM, analog ICs, RFICs, MMICs, etc.)
- Quantum computing (superconducting, trapped ions, silicon-based, etc.)



More Information: [www.keysight.com/find/pz2131a](http://www.keysight.com/find/pz2131a)

## Key specifications and characteristics

		PZ2130A	PZ2131A
Number of channels		5	
Number of slots		1	
Output range	Max. voltage	30 V	
	Max. current (DC)	500 mA	
	Max. current (Pulse)	N/A	500 mA
Resolution	Min. voltage	6 $\mu$ V	
	Min. current	100 pA	10 pA
Current measurement noise RMS(1 PLC)		75 pArms	35 pArms
Voltage source noise	RMS (20 MHz)	< 1 mVrms (< 25 $\mu$ Vrms with PX0107A)	
	RMS (200 MHz)	< 3.3 mVrms	
Min. pulse width		N/A	100 $\mu$ s
Max. slew rate		0.15 V/ $\mu$ s	
Digitizer mode		No	Yes
Max. sampling rate		250 kSa/s	500 kSa/s
Auto measurement ranging		Yes	
Seamless current measurement ranging		Yes	

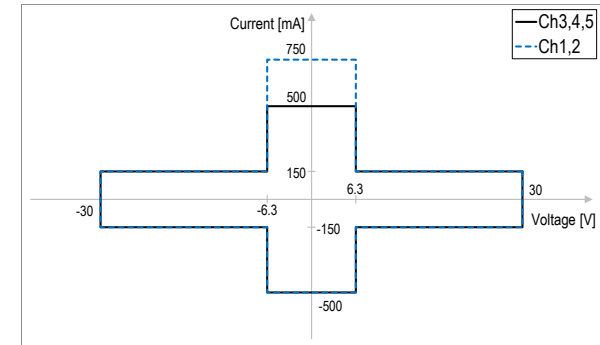


Figure 2. Voltage and current output capability per channel

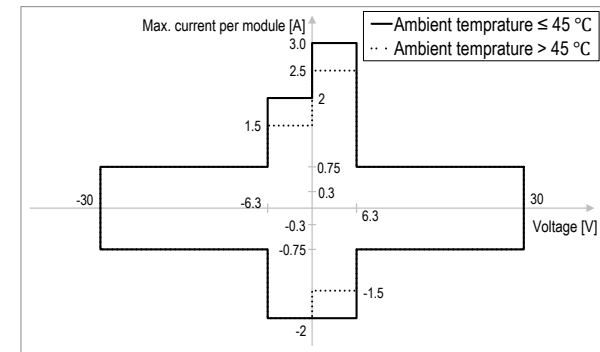
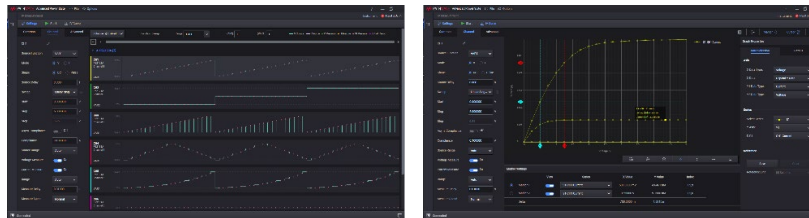


Figure 3. Voltage and total current output capability per module

## PathWave IV Curve software

PathWave IV Curve software enables the PZ2100A series SMU solution to accelerate research, development, and design verification by executing synchronous current-voltage (IV) measurements on up to 20 channel SMUs in a mainframe, immediately reviewing test results on graphs and tables and efficiently generating reports without programming.



## PZ2100 High Channel Density Precision SMU Solution



Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at [www.keysight.com](http://www.keysight.com).