

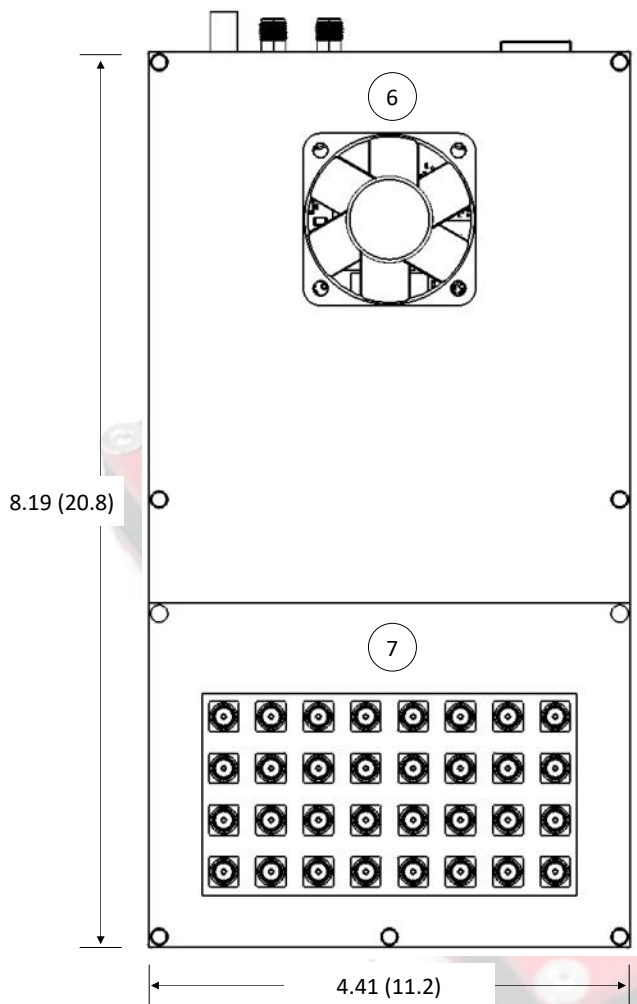


Compact, High Sampling and High Frame Rate Data Acquisition Unit (DAQ) with 32-Channels

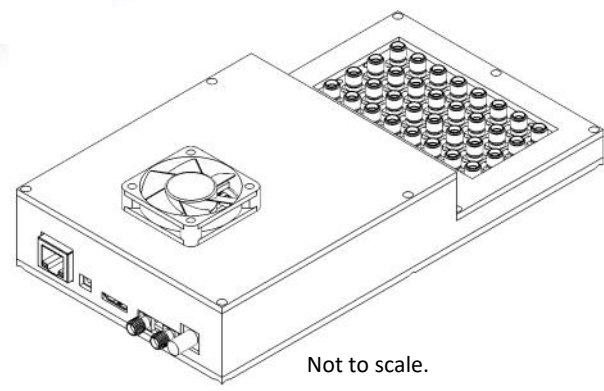
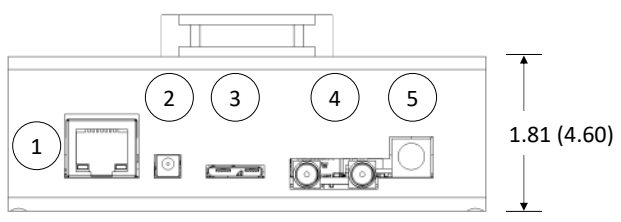


- Compact housing and SMA for easy instrument integration
- Very fast data transmission with up to 6000 fps and 100,000 data points per frame per channel
- Internal trigger generator allows external device triggering at defined frequencies. Continuous mode sends trigger signal as soon as previous acquisition is complete (highest frame rate)
- Integrated amplifier chips with digitally controlled gain
- +40 dB Gain from compact 2 x 20 mm preamps per channel
- Optical and electrical trigger inputs
- Open SDK and access to raw data provided by DAQ software
- Option for connecting units in parallel to increase channel count

Channels	Channels per ADC	32	
	Preamp Boards	1	
	Channels per Preamp Board	32	
ADC	Programmable Gain	-4 to 54 dB	(1) Low Pass programmable filters available
	Bandwidth @ -3 dB ⁽¹⁾	40 kHz to Nyquist	(2) 6000Hz with 1000 points 12-bit
	Resolution	12/14-bit	(3) 100,000 points per frame per channel with 65Hz trigger 12-bit
	Sampling Rate	76.9/65 MSPS	(4) Measured with 50Ω load. Actual gain will depend on the probe capacitance (typical channel gain mismatch < 1 dB). Crosstalk is ≤ -50 dB (might be higher with custom connector). In order to archive ≤ -50 dB crosstalk custom connector must have signal and ground pins altered per channel or in checkerboard order.
	Max Trigger / Frame Rate ⁽²⁾	6000 Hz / fps	(5) HiZ is the best to minimize noise at high frequencies.
	Max Points ⁽³⁾	100,000	(6) Measured using signal generator and oscilloscope with 50Ω input.
Preamp	Amplification ⁽⁴⁾	40 dB	
	Input Impedance ⁽⁵⁾	39 kΩ	
	Output Impedance	50 Ω	
	Bandwidth @ -3 / -6 dB ⁽⁶⁾	40/25 kHz to 30/35 MHz	



1. RJ45 port with status and diagnostic LEDs for troubleshooting
2. 12VDC 2.5A (power supply included)
3. USB 3.0 port for high data transmission to end-user or PhotoSound provided computer
4. Programmable electrical trigger input and output (isolated SMA connectors)
5. Optical trigger input for connecting 2 mm patch fiber allows precise triggering from the end-user's pulsed laser
6. Silent operation cooling fan and heatsink mounted directly on ADC
7. Industry standard SMA input connectors for third-party probe.



All dimensions approximate in inches (cm).

Not to scale.

Computer* (optional)	Software
4+ Core i7 Processor Nvidia Graphics Card for CUDA only 16+ GB DDR4 Memory 500+ GB PCIe Solid-State Drive Windows 10 64-bit	Windows 7/10 64-bit drivers Standalone DAQ Application Software Development Kit (LabView) TDMS data output

* End-user or PhotoSound provided

Version DAQ32.001.0119 © 2019
 Trademarks are the property of PhotoSound®
 All specifications are subject to change without notice.
 FLASH DAQ32 is classified EAR99 and does not require an export license.