



# Technical Comparison

# GEN5i VS ODYSSEY COMPARISON



The GEN5i supersedes the Odyssey in most specifications while being smaller, lighter and more robust

### Internal PC and physical characteristics

	Odyssey	GEN5i	Benefits
<b>Size (W x H x D)</b>	47 cm x 24 cm x 56 cm (18.5 x 9.5 x 22 inches)	45 cm x 33 cm x 36 cm (17.7 x 13 x 14.25 inches)	Easier to handle
<b>Volume</b>	63168 cm <sup>3</sup>	53460 cm <sup>3</sup>	15 % less volume
<b>Weight (full)</b>	~23 kg	~20 kg	10 % less weight
<b>Screen size and resolution</b>	10 inch; 640 x 480 / 800 x 600	17 inch; 1280 x 1024	~ 3 times more information displayed
<b>Processor and operating system</b>	PII / III; Windows 95/98	DualCore; Windows Vista 64-bit	Latest OS; good for 5 years+
<b>PC motherboard</b>	Industrial slot PC	Standard motherboard	Easy upgrades later
<b>Expansion slots</b>	2 ISA	2xPCI, 1xPCIe, all 1/2 length	Up-to-date expansion
<b>Connectivity</b>	Ethernet, USB 1.1	Ethernet, WLAN, LAN, USB2.0, DVD-RW, optional removable HD	Up-to-date connectivity; good for safety critical application

Data acquisition characteristics			
	Odyssey	GEN5i	Benefits
<b>Acquisition slots</b>	4 acquisition & 8 amplifier slots	5 slots for input modules	25 % more
<b>Channel count</b>	32 slow speed DC or 32 physical inputs or 16 high speed inputs	40 slow speed DC or 20 physical inputs or 20 high speed inputs	25 % more channels (except physical inputs)
<b>Sample rates</b>	100 kS/s or 10 MS/s or external (50 kHz)	200 kS/s / 1 MS/s or 25 MS/s / 100 MS/s or external (500 kHz)	More capabilities and 10 x faster
<b>Hard Disk capacity</b>	2 - 32 GB max	1200 GB standard	40 x more room for your data
<b>Streaming rate to hard disk</b>	3.2 MS/s with OD100 8 MS/s with OD200	28 MS/s	Up to 30 x faster streaming
<b>Transient memory</b>	Up to 40 MSamples	Up to 9000 MSamples	200 x more
<b>Pretrigger</b>	Limited to 20kS with OD100	Limited by RAM or HD capacity only	Unlimited pretrigger acquisitions
<b>On-board software</b>	Acquisition and Playback only	Acquisition, playback, Analysis, Reporting, Basic FFT	All in one approach; 64-bit software
<b>Input modules</b>	DC, Iso DC, Bridge, ICP, TC, High Speed Diff	DC, Iso DC, Iso Bridge, Iso ICP, High Speed Diff	All amplifiers are higher accuracy and performance
<b>Accuracy</b>	Most amplifiers are 0.25 % typical	Most amplifiers are 0.1 % typical	Get more signal details
<b>Filters</b>	Limited, software in OD100 Limited, hardware in OD200	Full selection of time or frequency domain optimized filters	Select the best filter for your application
<b>Storage location</b>	embedded SCSI drives; data transfer needed to access data	any PC storage location incl. removable HD, network or USB drive	Stored data is available immediately without transfer or conversion

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