










Polysomnography

Information for this guide based on data submitted by product manufacturers. Sleep Review strives for accuracy in all data but cannot be held responsible for claims made by manufacturers.

Company		Cadwell Laboratories Inc	CareFusion	CleveMed	Compumedics USA Inc	Embla Systems
Product Name		 Easy III Amplifier with Easy III Software	 SomnoStar software with z4 amplifier	 Sapphire PSG Amplifier with Crystal PSG Software	 Somté PSG System with ProFusion PSG 3 Software	 RemLogic PSG System
Website		www.cadwell.com	www.carefusion.com	www.CleveMed.com	www.compumedics.com	www.embla.com
SOFTWARE	Year Introduced	2007	1986	2003	2007	2007
	Current Version Number	3.6.18	9.1	7.5	3.4	
	Upgrades Policy	No charge	Free unless hardware or training is required. Always free under contract.	Included during warranty or extended maintenance plan	Updates within version: free of charge; upgrades to new version for special pricing, with further discounts for customers under warranty or service contract	Free software upgrades
	Custom Reports	No charge	Custom reports available	One set included with purchase, customer may create their own	Customer may easily create their own with the use of imbedded ProFusion Report tools in Microsoft Word.	Available as part of software package or as a service from Embla
LAB MANAGEMENT SOFTWARE	SQL Based	No	Yes	No	Yes	Available when used with Enterprise Sleep Business Software
	Separate or Integrated	Integrated	Integrated and separate	Integrated	Integrated	Integrated
	Queryable Search Engine	No	Yes	No	Yes	Available when used with Enterprise Sleep Business Software
	HL 7 Enabled	Yes, optional	Yes	No	Yes, optional	Available when used with Enterprise Sleep Business Software
AMPLIFIERS	Year Introduced	2007	2008	2007	2011	2000
	Number of Channels AC	46-150	48	21	14 AC, total of 24 channels	52
	Number of Channels Auxiliary Devices	20	16	1	16	8
	Works with All Devices That Offer Output of +/-1 or +/-5 Volts	Yes	Yes	Yes	Yes	Yes
	Sampling Rates	4000 Hz per channel	2000 Hz	256 Hz	Up to 1-200 Hz, channel specific	Selectable up to 2000 Hz
	AASM Compliant	Yes	Yes	Yes	Yes	Yes
	Impedance Testing at the Bedside	Yes	No	Yes	Yes	Yes
	Transmission Mode	Cat 5/6	Cat 5	900 MHz or 2.4 GHz wireless	Wireless, Bluetooth	Ethernet
	Warranty	1 year with purchase of the system	1 year	1 year	1 year	2-year manufacturer warranty, optional Extended Support available
Operating System	Windows XP	Windows XP	Windows XP, Vista (32 and 64 bit), or 7 (32 and 64 bit)	MS Windows XP Professional, Windows 7 Professional, MS Server 2005, MS Server 2008	Windows XP Professional SP3, Windows Vista Business SP2, Windows Vista Home Premium SP2, Windows 7 Home Premium Professional, or Ultimate.	
VIDEO	Fixed Focus or PTZ	Both available	Both	Both available	Both	Both
	Integrated IFR Generator or Stand-alone	Both available	Stand-alone	Both available	Both available	Both
	Frame Rate of Capture Adjustable from X to Y	25-30 frames per second	Yes	1, 5, 10, and 30 frames per second	Yes, from 0.5 to 30 frames per second	Yes
	Adjustable Frame Rate During Collection	No	Yes	No	No	Yes
	Post Acquisition Editing	Yes	Yes	No	Yes	Yes
	Integrated Intercom	No, offered for purchase	No	No	Yes, Louroe	Yes
TRANSDUCERS	Proprietary Connectors	Yes, for EasyNet modules	No	No	Yes, for RIP bands, position and microphone transducers	Both
	RIP Belts (Reusable/Disposable)	Both, ships with reusables	Both	Both available	Reusable	Both
	Sum Channel Calculations	Interfaces with Sum Channel RIP systems	Yes	No	Yes, software based	Yes
	RIP Integrated or Requires Conditioner Box	Conditioner Box if Sum Channel is used	Neither	Integrated	Integrated	Integrated with Xsum for derived airflow if no airflow detected
INSTALLATION/TRAINING	Pull All Cables & Install All AV Equipment	Yes	Yes	Yes, no cables required	Yes, for additional charge	Yes
	Installation Included in Purchase	Yes	Yes	Yes	Yes	Optional
	Number of Days for Initial Training	1-3	3	2	3	Customer's choice, minimum of 1 day
	Webex Training Available	Yes	Yes	Yes	Yes, via Go-to-Meeting	Yes
SUPPORT	Available 24/7 for Live Contact	Yes	Yes	Yes	Yes	Yes
	Cost of Phone Support	Free	Free	Free	Included in warranty period and under service contract	Free
	Webex Available	Yes, via Go2Assist	Yes	Yes	Yes, via Go-to-Assist	Yes
MAINTENANCE	Service Contract Available	Yes	Yes	Yes	Yes	Yes
	Free Loaners Available During Warranty/Contract	Yes	Not needed, swap out	Yes	Yes	Yes

Grass Technologies, An Astro-Med Inc Subsidiary	Natus Medical Inc	Nihon Kohden America	Philips Respironics	Sleepvirtual/ Neurovirtual USA Inc	SOMNOmedics GmbH
					
Comet PSG-PLUS Amplifier System with TWIn software	Natus SleepWorks with Xitek Connex Amplifier	JE-921A Amplifier with Polysmith 8	Alice 6 LDxN with Sleepware G3	Sleepvirtual BWII PSG	SOMNOscreen plus PSG
www.grasstechnologies.com	www.natus.com	www.nkusa.com/neurology_cardiology/	www.philips.com/sleepdx	www.sleepvirtual.com	www.somnomedics-diagnostics.com
2000	2001	1997	2011	2008	2007
5.0	7.1	8.0	Sleepware G3 v3.1	1.70	2.3.0
Updates within a series are included. Major version upgrades are included under service contract.	Included under service contract	Updates are free, major version upgrades for a fee	No charge, updates with system purchase	Free	Free
Included with purchase. Customer may create their own.	Included with purchase	Customer may create, created for a fee	4 hours, by site, of custom report writing with system purchase, then hourly fees; or customer may create own.	Free of charge (first 5 hours); customer may create own	Customer may create their own, company created possible
Yes	Yes	Yes, MySQL	Yes, via third party Lab Manager Solution	Yes	Yes
Integrated	Integrated	Integrated	Third party is separate	Integrated (optional)	Integrated
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes, optional	Yes (optional)	Yes
2011	2005	2005	2011	2008	2007
30 standard (40 optional)	32 referential & 6 differential	32	57	29	33
8 standard (17 optional)	10DC, + Spo ₂ and pulse rate	4	8	3	16
Yes, both	Yes	Yes	Yes (+/- 1.65v)	Yes	Yes
800 Hz sampling rate; up to 400 Hz storage rates	256 Hz and 512 Hz	Variable 200-2000 Hz	2000 Hz sampling, up to 500 Hz storage	1000 Hz Display and 200 Hz Storage	Up to 4 kHz
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes (real-time with PC)	Yes with PC	Yes
Ethernet (Cat 5)	TCP/IP (Cat5e/Cat6) or USB	Cat 5	Cat 5	Cat 5	Wireless
Lifetime warranty on Grass Technologies manufactured parts	1 year	1 year	2 years	1 year, extended up to 7 years	2 years
Windows 7; also supports Windows XP	Windows XP, Windows 7	Windows XP Professional	Windows 7 Professional (32 or 64 bit), Windows Vista Business (32 or 64 bit), XP Professional (32 or 64 bit). Windows Server 2003 and Windows Server 2008 are also supported but limited to non-acquisition use only.	Windows 7, also compatible with other Windows versions	Windows XP, Windows 7
Both available	Both available	Both	Both available	Both available	Both available
Both available	Stand-alone IR included	Both	Integrated on fixed focus, stand-alone on PTZ	Integrated	Integrated
Yes, 1 to 30 frames per second	Yes	Yes	Yes, MPEG4 adapts capture to motion and compression up to 30 FPS.	Yes	Yes
No	Yes	No	Yes	Yes	Yes
Yes	Yes	Yes	Yes	No	Yes
Yes	Yes, optional	No	Yes, by VoIP	Yes	Yes
No	No	No	No	No	Yes
Both	Both	Reusable	Reusable zRIP DuraBelt	Reusable	Reusable
Yes	Yes	Yes	Yes, via Sleepware	Yes	Yes
Conditioner Box	Requires Sensor Module	Conditioner	Integrated	Conditioner Box	Conditioner Box
Yes	Install equipment, customer pulls cables	Yes	Yes, as purchase option	Yes (Optional)	No
Yes	Yes	No	Yes	Yes	Yes
3	3	3	3-4	3	1-3
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Free	Included under warranty and with service contract	Free	Free	Free	Free
Yes	Yes	Yes	Yes	Yes, integrated with software package	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes, depending on level of service contract.	Yes	Yes	Yes	Yes	Yes