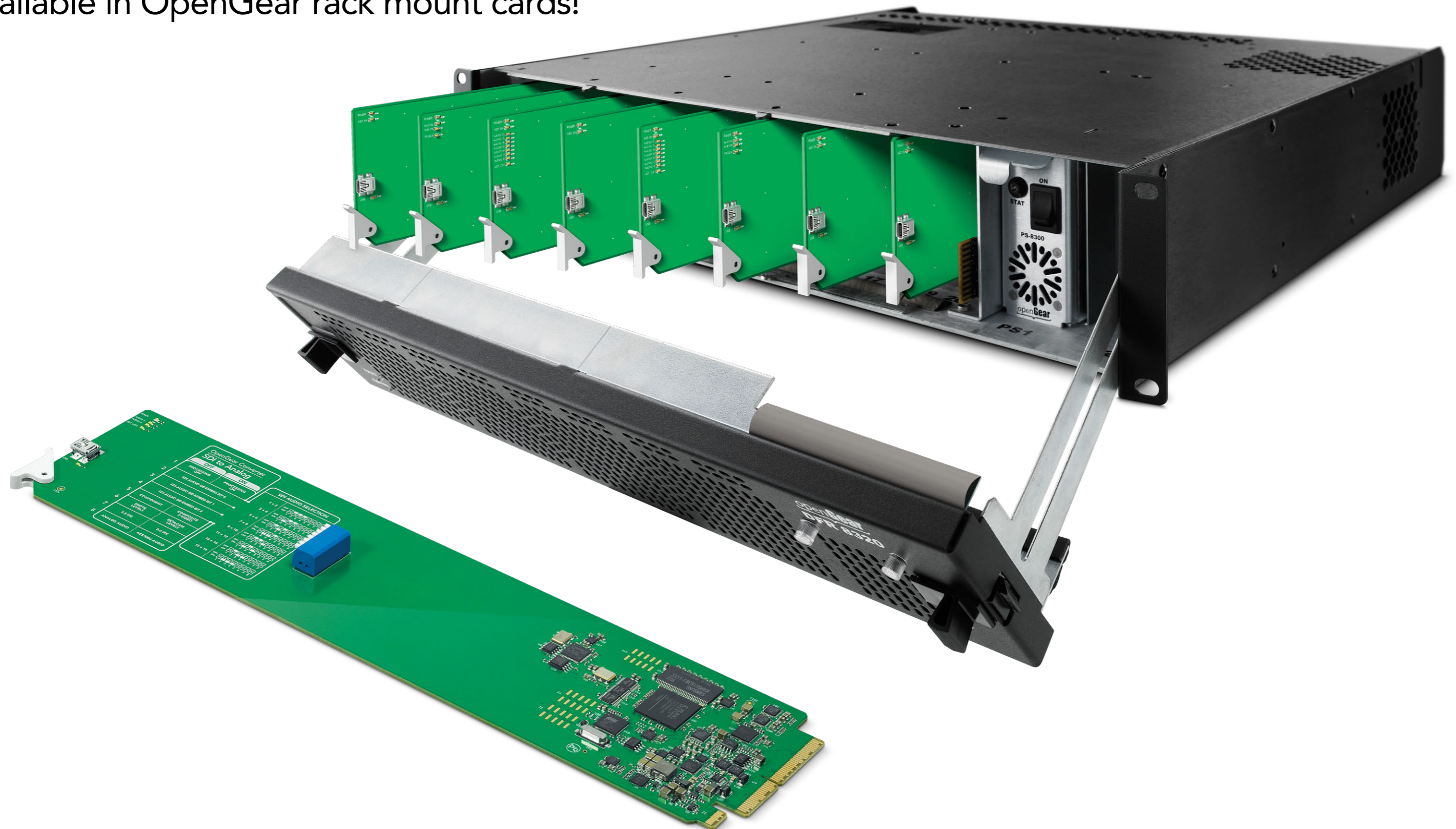


## OpenGear Converters

The world's greatest converters now available in OpenGear rack mount cards!



# Build your SDI studio with the world’s most advanced and easy to use converters!

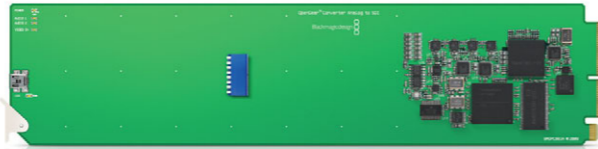
The new Blackmagic OpenGear Converters give you a great range of conversion, all packed with the latest video technologies at an affordable price! OpenGear is the television industry’s open standard for rack based conversion and processing. Get the freedom and cost savings of an open standard combined with centralized network control and monitoring using the OpenGear DashBoard software for Windows™, Mac OS X™ and Linux™!

Blackmagic OpenGear Converters switch between all SD and HD video formats the instant the video input changes. A huge range of standards are supported including NTSC, PAL, 1080i/59.94, 1080i/50, 1080PsF/23.98, 1080PsF/24, 720p/59.94, 720p/50 and new formats can be added via USB. Choose from analog, HDMI, audio, optical fiber, and sync generator models! There’s a single card model for each type of video conversion.



## OpenGear Converter SDI to Analog

Includes everything you need to convert from SDI to analog HD/SD component, NTSC and PAL video out, plus balanced AES/EBU and analog audio out. Easily connect to Betacam SP, VHS and video monitors. Features a built in hardware down converter to connect HD-SDI video to SD equipment!



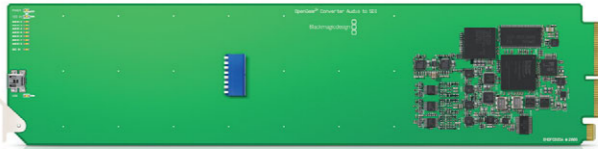
## OpenGear Converter Analog to SDI

Perfect for converting from analog HD/SD component to SDI out with balanced AES/EBU and analog audio embedding. Now you can convert analog devices such as Betacam SP, VHS, set top boxes, gaming consoles and HDV cameras to incredible quality SD/HD-SDI video.



## OpenGear Converter SDI to Audio

Includes everything you need to de-embed 4 channels of analog audio or 8 channels of AES/EBU digital audio from any SDI video connection. Easily access the audio in any SDI video connection for output to audio equipment such as audio mixers, analog broadcast decks, audio monitors and more!



## OpenGear Converter Audio to SDI

Includes everything you need to embed 4 channels of analog audio or 8 channels of AES/EBU digital audio into any SDI video connection. Embed audio from audio mixers and analog decks into SDI video for use with SDI routers and decks, or to add extra audio channels to video converters!



## OpenGear Converter SDI to HDMI

Converts from SDI to HDMI video out with embedded HDMI audio. Imagine using big screen TVs and video projectors as broadcast video monitors! Now it’s incredibly easy to connect a huge range of HDMI displays to SDI based equipment!



## OpenGear Converter HDMI to SDI

Ideal for converting from non copy protected HDMI devices to SDI out with embedded SDI audio from the HDMI input. Now you can convert HDMI video devices to SDI, or add SDI outputs to computers with HDMI compatibility.



## OpenGear Converter Optical Fiber

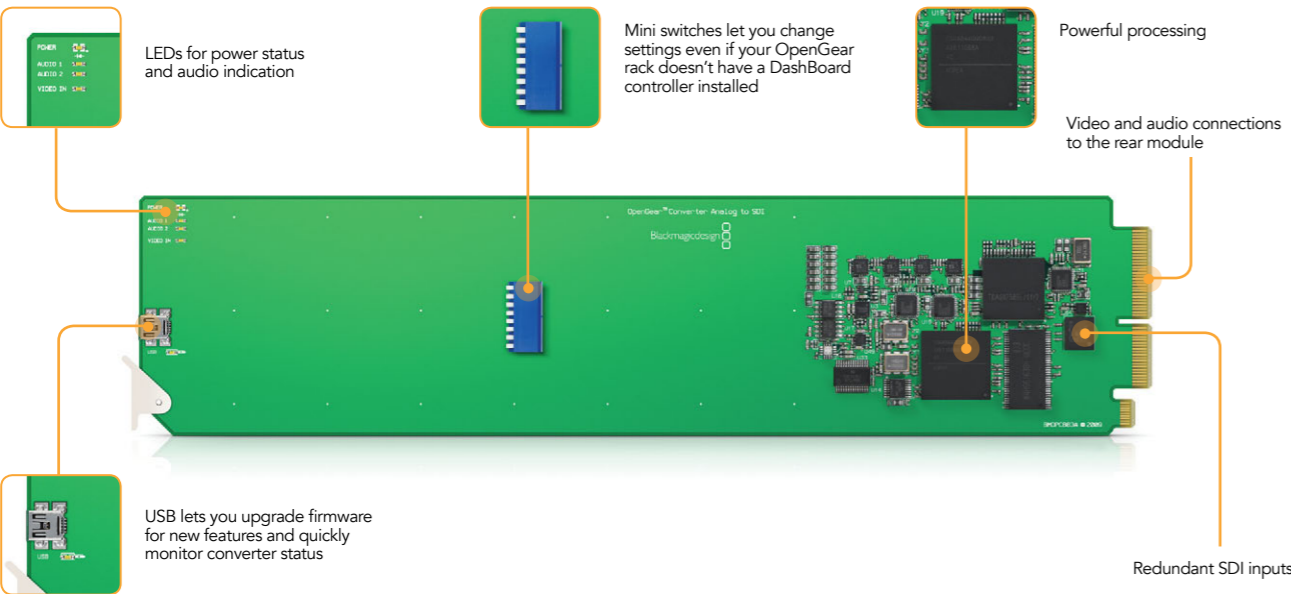
Convert SDI to Optical Fiber, and Optical Fiber to SDI simultaneously. Blackmagic OpenGear Optical Fiber auto switches between any SD, HD, 3 Gb/s HD-SDI video standards and each direction is completely independent.



## OpenGear Converter Sync Generator

Includes 10 crystal stabilized video reference outputs for referencing all the video equipment in your studio with either high definition tri-sync or standard definition black burst. Perfect for small studios or outside broadcasts!

OpenGear converters at a glance!



Redundant SDI Input

Blackmagic OpenGear Converter models, SDI to Analog, Audio to SDI and SDI to Audio, feature a unique redundant SDI input for mission critical or live broadcast tasks. Simply connect a redundant cable to the second input and if the main SDI input is lost, Blackmagic OpenGear Converters will automatically switch over in an instant. A loop-through SDI output is also provided for connecting to other devices. You can also loop to other Blackmagic OpenGear Converters when de-embedding more audio channels.

Includes AES/EBU and Analog Audio

Blackmagic OpenGear Converters feature 24 bit analog and 24 bit digital audio. You can select either analog or AES/EBU digital audio via mini switches, or remotely via the DashBoard network control software. Blackmagic OpenGear Converters will then switch to use either analog or AES/EBU digital audio. Blackmagic OpenGear Converters support the standard 2 ch and 4 ch audio rear modules, so they can be used with other brand OpenGear products.



High Quality

Blackmagic OpenGear Converters are built to the highest quality standards with low SDI jitter. You get the longest SDI cable lengths combined with ultra low noise analog video and audio for a true broadcast quality solution.



Hardware Down Converter

If you have older standard definition analog equipment in your facility then you'll know how hard it is when modern SDI equipment unexpectedly changes between SD and HD. Blackmagic OpenGear Converter SDI to Analog includes an incredible quality HD down converter that automatically adapts to the input video format and outputs standard definition video in letterbox, anamorphic 16:9 or center cut 4:3.

Easy to Use

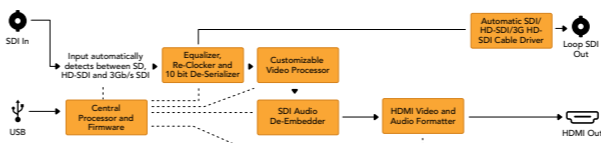
Blackmagic OpenGear Converters are similar, so they're easy to understand. With advanced 3 Gb/s SDI technology, every card is fully compatible with all your SD and HD equipment, plus you can update new formats via USB. Blackmagic OpenGear Converters can be set up via mini switches, DashBoard, or via USB using Blackmagic Design's Converter Utility. That's three completely different ways to configure, so you're never stuck in a critical live situation.



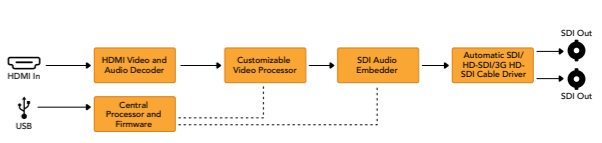
New 3 Gb/s SDI Technology

With the latest 3 Gb/s SDI technology built into Blackmagic OpenGear Converters, you know you're getting the latest technology. New standards can be uploaded via the USB port. 3 Gb/s SDI is also fully compatible with all your SD and HD equipment.

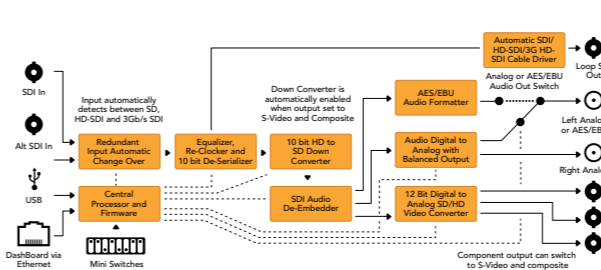
OpenGear Converter SDI to HDMI



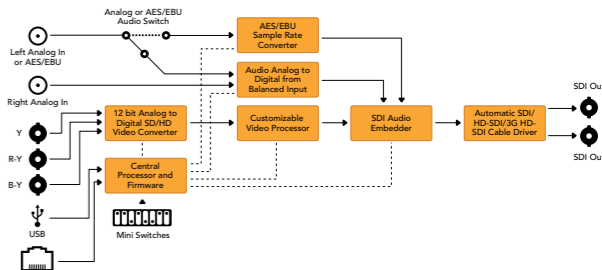
OpenGear Converter HDMI to SDI



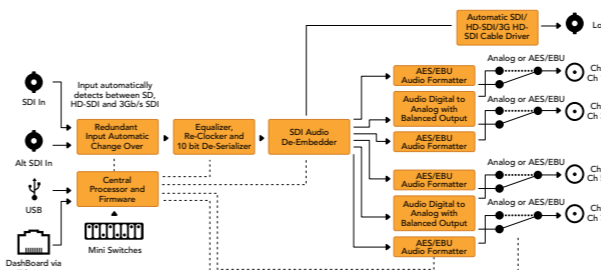
OpenGear Converter SDI to Analog



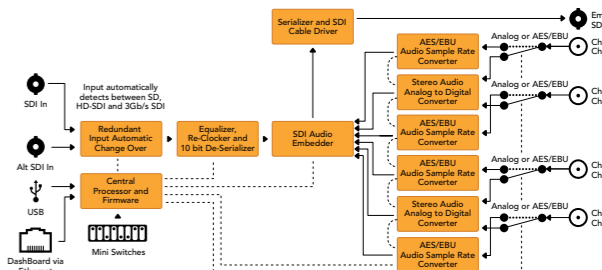
OpenGear Converter Analog to SDI



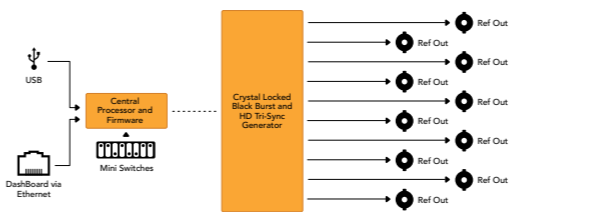
OpenGear Converter SDI to Audio



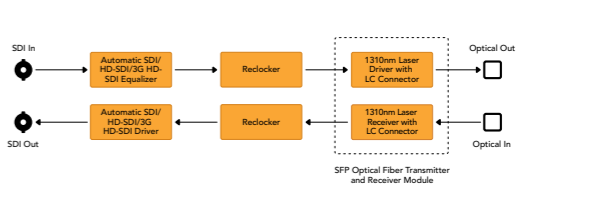
OpenGear Converter Audio to SDI



OpenGear Converter Sync Generator



OpenGear Converter Optical Fiber

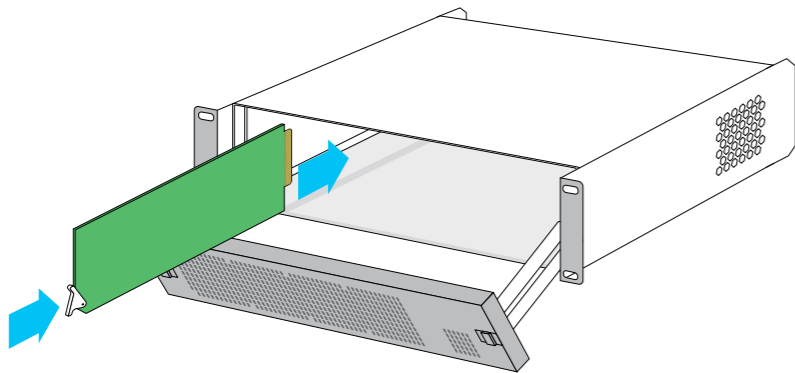




About OpenGear™

OpenGear is an open standard for rack mount converters and processing for television broadcasters. OpenGear uses a 2 rack unit rack frame that normally holds up to 10 plug in cards, or when using simpler cards, a double density frame can be used to hold up to 20 cards. Many manufacturers develop OpenGear cards and frames that can be mixed and matched. This gives you the freedom to build your facility without being locked into a proprietary rack standard.

Whatever unique or custom need you have, there will most likely be an OpenGear partner who makes it! OpenGear cards are hot swappable and can be controlled by the same java based DashBoard network control and monitoring software. DashBoard automatically checks the plugged in card's function without any complicated driver loading. Because DashBoard is TCP/IP network based, you can monitor from remote sites, or monitor centrally within massive installations consisting of hundreds of OpenGear cards and rack frames.



**Broadcast Strength Conversion!**  
Engineers love rack mounting converters because it's the only way to make sure you can instantly change the converter in case of a break down.

SDI to Analog	Analog to SDI	SDI to HDMI	HDMI to SDI	SDI to Audio	Audio to SDI	Optical Fiber	Sync Generator
Connections							
SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None	SDI Video Input: Switchable between SD, HD and 3 Gb/s SDI.	SDI Video Input: None
SDI Redundant Input: Automatically switches over if main SDI input is lost.	SDI Redundant Input: None			SDI Redundant Input: Automatically switches over if main SDI input is lost.		SDI Redundant Input: None	
SDI Video Outputs: Automatically matches the SD, HD or 3 Gb/s SDI video input.							None
Optical Fiber Video Input: None						Optical Fiber Video Input: 1 x 10 bit SD/HD/3 Gb/s SDI switchable.	Optical Fiber Video Input: None
Optical Fiber Video Output: None						Optical Fiber Video Output: 1 x 10 bit SD/HD/3 Gb/s SDI switchable.	Optical Fiber Video Output: None
Multi Rate Support: Auto detection of HD or standard definition inputs.							Multi Rate Support: Manually set.
Updates and Configuration: Via USB 2.0 high speed. (480 Mb/s)							
Re-clocking: Yes							
Optical Fiber Audio Input: None						Optical Fiber Audio Input: 16 channel embedded.	Optical Fiber Audio Input: None
Optical Fiber Audio Output: None						Optical Fiber Audio Output: 16 channel embedded.	Optical Fiber Audio Output: None
Analog Audio: 2 channels of professional balanced digital with OpenGear™ standard 3 pin connections.		Analog Audio: None		Analog Audio: 4 channels of professional balanced analog audio with openGear™ standard 3 pin connections.		Analog Audio: None	
2 channels of professional balanced digital with OpenGear™ standard 3 pin connections.		None		8 channels of professional balanced digital with openGear™ standard 3 pin connections.		None	
None		HDMI out	HDMI in	None			
Component, NTSC, PAL and S-Video from SD-SDI input. Component HD from HD-SDI input.	Component SD/HD.	None					
Standards							
SDI Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.							None
SDI Compliance: SMPTE 292M, SMPTE 259M, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 and SMPTE 297M for Optical Fiber SDI.							None
SDI Video Sampling: 4:2:2							None
SDI Color Precision: 4:2:2							None
SDI Color Space: YUV							None
SDI Audio Sampling: Television standard sample rate of 48 kHz and 24 bit.							None
SDI Auto Switching: Automatically selects between SD SDI, HD-SDI and 3 Gb/s SDI.							None
Analog Format Support: 625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94 and 720p60.							625/25 PAL, 525/29.97 NTSC, 1080PsF23.98, 1080PsF24, 1080i50, 1080i59.94, 720p50 and 720p59.94.
Analog Color Precision: 4:2:2							None
Analog Color Space: YUV							None
HDMI Format Support: 625/25 PAL, 525/29.97 NTSC, 625/50p PAL, 525/59.94p NTSC, 1080p23.98/24, 1080i50, 1080i59.94/60, 720p50 and 720p59.94/60.							None
HDMI Color Precision: 4:2:2 and 4:4:4							None
HDMI Color Space: YUV and RGB							None
Content Protection: OpenGear Converter HDMI to SDI cannot convert from copy protected HDCP encrypted HDMI sources to SDI.							
Extras							
Software Control: Mac OS X™ and Windows™ software upgrade via USB.							
Settings Control: OpenGear DashBoard network control software, Mini Switches or USB software.							
Firmware Upgrade: Via included firmware updater application.							
Product Warranty: 3 Year Limited Manufacturer's Warranty.							