

# 9011

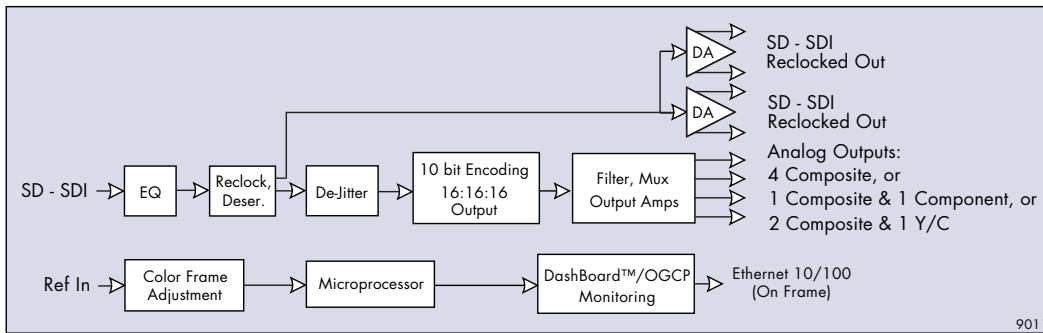


## Standard Definition D/A 10-bit SDI to Analog Composite, Y/C and Component

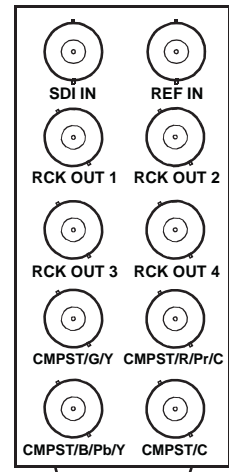
The 9011 is a 10-bit SDI SMPTE 259M-C to analog composite, Y/C, component YPbPr, and RGB converter. The 10-bit encoding engine oversamples 4:2:2 to 4:4:4 for internal processing, and then 4x oversamples the outputs to 16:16:16 for improved signal performance. An internal VCXO with de-jitter loop filter to 2Hz reduces digital jitter prior to encoding, improving burst stability on composite and Y/C signals. A reference circuit color frames the 9011 for timed environments with full user proc control.

### Features

- 10-bit digital to analog conversion
- Four user configurable analog outputs: composite, component, (YPbPr and RGB) and Y/C outputs
- Supports component BetaCam™, MII™ and SMPTE/N10
- Encoding to 16:16:16 over sampled outputs
- 10-bit digital video path
- Internal de-jitter filter to 2Hz
- Four relocked SDI outputs
- Internal color bar generator
- User configuration switches on board edge
- User proc control of video levels
- Remote monitoring via Dashboard™ software or OGCP-9000 remote control panels
- Five year warranty



9011 Block Diagram



RM-9011-A

### Specifications

**Serial Video Input**

270-Mbit SMPTE 259M-C

**Digital Outputs**

4 x relocked SDI 270-Mbit SMPTE 259M-C

**Analog Outputs:** 4 x user configurable:

- 4 composite or
- 2 composite with Y/C
- 1 composite and component or RGB

**Output Jitter**

Internal digital de-jitter filter to 2Hz

**D/A Process**

4x or 2x over-sampled (16:16:16 or 8:8:8)

**Frequency Response**

5 MHz +/- 0.15 dB, 0-6.75 MHz +/- 0.25 dB

**SNR**

> 70 dB

**Proc. Control**

Digital control of gain, DC, saturation and phase, filtering, gamma correction and DNR

**Power**

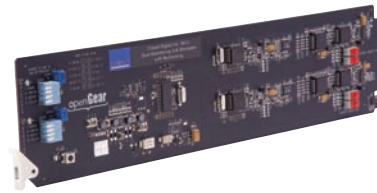
6 watts

### Ordering Information

**9011** Standard Definition D/A 10-bit SDI to Analog Composite, Y/C and Component

**RM-9011-A** Rear I/O Module (Single slot) - SDI Input, 4 Relocked SDI Outputs, 4 Analog Outputs (Composite, Component, Y/C)

# 9015



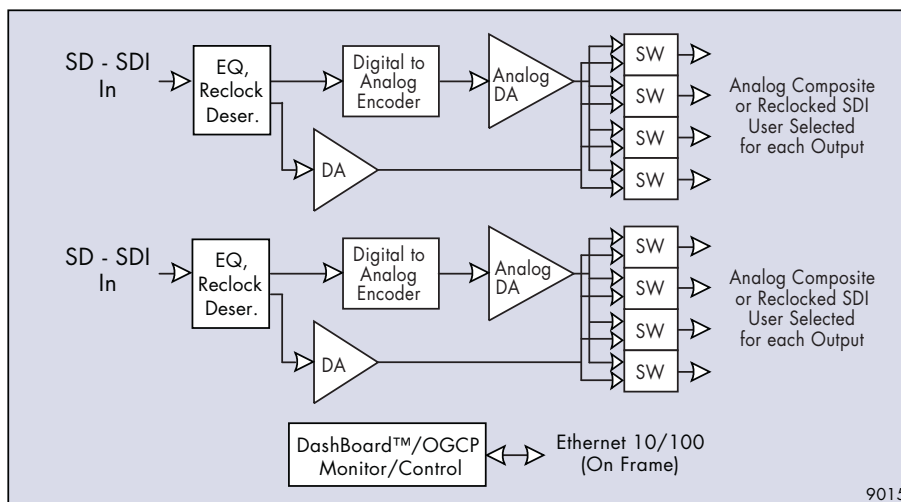
## Dual Monitoring Converter SDI to Analog Composite with Reclocked SDI

The 9015 is a dual SDI video-to-analog composite and reclocked SDI converter. Analog or digital output configuration can be selected as needed for a particular application.

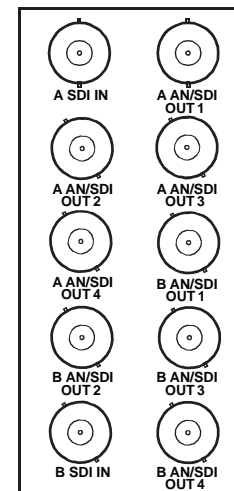
The 9015 has two digital-to-analog encoders (A and B SDI to analog encoders). Each encoder has four outputs that can be user-configured as analog or reclocked SDI on an output-by-output basis. Composite output gain control and user configurations are adjustable using the card-edge controls.

### Features

- Two conversions on one card (SDI-SMPTE 259M-C)
- Four user selectable composite or SDI outputs per converter
- 8-bit data path, 10-bit DAC
- Automatic configuration NTSC/PAL
- Built-in color bar generator (analog outputs only)
- Video gain control accessible on card edge
- Color encoding user selectable to B&W
- Data-lock indicator
- VBI blanking on/off
- Remote control/monitoring via Dashboard™ software or OGCP-9000 remote control panel
- Five year warranty



9015 Block Diagram



RM-9015-A

### Specifications

<p><b>Input</b> 2-270 Mbit SMPTE 259M-C</p> <p><b>Output</b> 8 outputs: 4 on A converter and 4 on B converter</p> <p><b>Digital Output</b> Up to 4 per converter, user selectable</p>	<p><b>Analog Output</b> Up to 4 per converter, user selectable</p> <p><b>Setup</b> User selectable on/off for NTSC</p>	<p><b>Power</b> 5 watts</p> <p><b>Indicators</b> 2 data lock indicators (one per converter)</p>
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### Ordering Information

- 9015** Dual Monitoring Converter - SDI to Analog Composite with Reclocked SDI
- RM-9015-A** Rear I/O Module (Single Slot) Dual SDI In, 4 Outputs per Input (switchable between Composite or Reclocked SDI)



# 9016



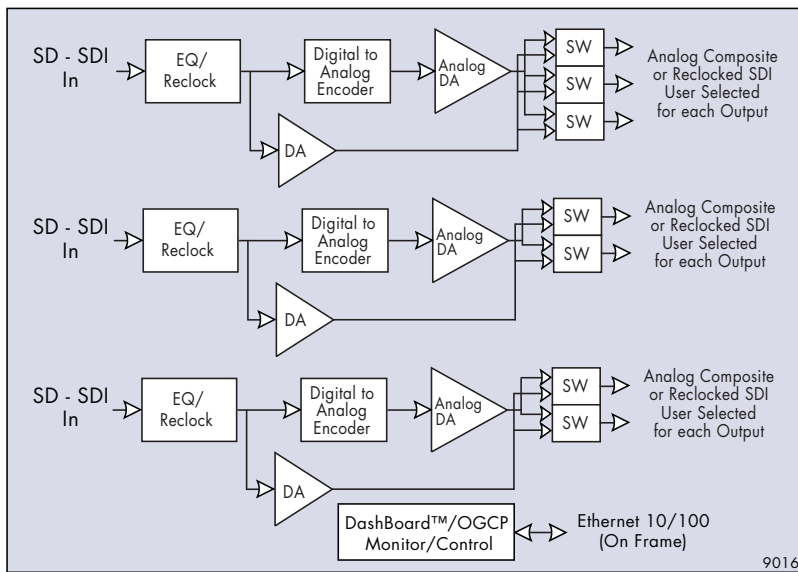
## Triple Monitoring Converter SDI to Analog Composite with Reclocked SDI

The 9016 is a triple SDI-to-analog composite encoder with reclocked SDI. Analog or digital output configuration can be selected as needed for a given application.

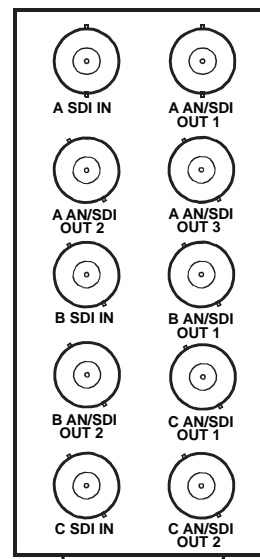
The 9016 has three separate SDI encoders, providing three outputs on converter A, two outputs on converter B, and two outputs on converter C. Each output can be selected to be either analog or digital. Analog output gain control for composite is adjustable using card-edge controls.

### Features

- Three conversions on one card (SDI SMPTE 259M-C)
- User selectable analog composite or SDI outputs
- 8-bit data path, 10-bit DAC
- Automatic configuration NTSC/PAL
- Color encoding user selectable to B&W
- Built-in color bar test generator (analog outputs only)
- Video gain control accessible on card edge
- Data-lock indicator
- VBI blanking on/off
- Remote control/monitoring via DashBoard™ software or OGCP-9000 remote control panel
- Five year warranty



9016 Block Diagram



RM-9016-A

### Specifications

**Input**

3-270 Mbit SMPTE 259M-C

**Output**

7 outputs: 3 on A, 2 on B, 2 on C (user selectable)

**Digital output**

Reclocking - Up to 2 on A, 2 on B, 2 on C converter (user switchable with composite analog)

**Analog Output**

Up to 2 on A, 2 on B, 2 on C converter (user selectable)

**Power**

7 watts

**Indicators**

3 data lock indicators (1 per converter)

### Ordering Information

**9016** Triple Monitoring Converter - SDI to Analog Composite with Reclocked SDI

**RM-9016-A** Rear I/O Module (Single Slot)-Ch A: 3 Out,-Ch B: 2 Out,-Ch C: 2 Out (Outputs switchable between Composite or Reclocked SDI)



# 9018

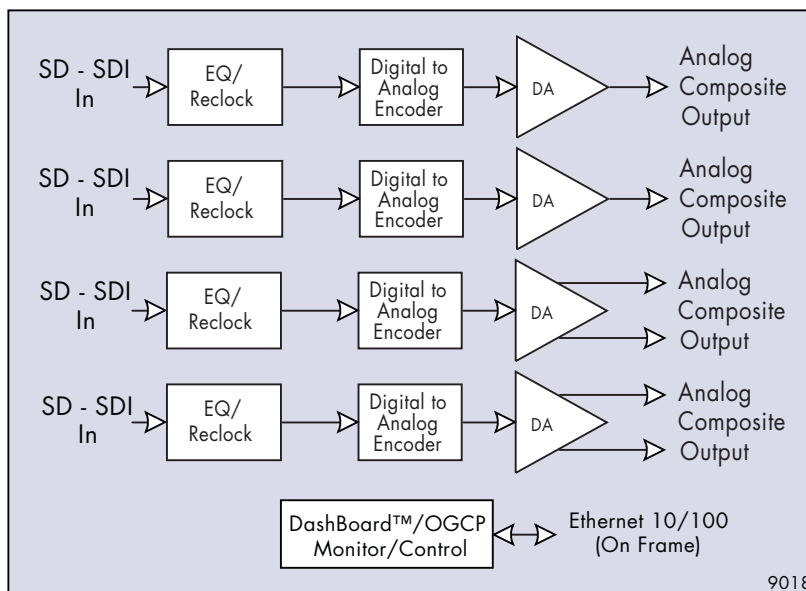


## Quad Monitoring Converter SDI to Analog Composite

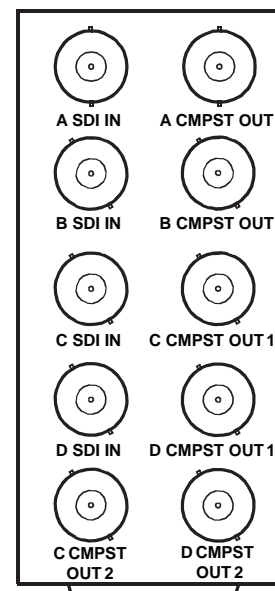
The 9018 is a quad 4:2:2 SDI-to-analog composite converter. Card-edge gain, status LED, and configuration switches allow adjustments without having to remove the card from the frame. Configuration switches allow access to setup on/off (NTSC only), VBI blanking on/off and test color bars on/off. Other features include true sync output levels of -300 mV, low power consumption, and remote monitoring (including power and temperature) using DashBoard™ software.

### Features

- Four conversions on one card (SDI SMPTE 259M-C)
- 8-bit input, 10-bit DAC
- Built-in color bar generator (Requires SDI clocking input)
- Automatic configuration NTSC/PAL
- Color encoding user selectable to B&W
- User gain control in-frame accessible from card edge
- User setup switches in-frame accessible from card edge
- Data-lock indicator
- VBI blanking on/off
- Remote control/monitoring via DashBoard™ software or OGCP-9000 remote control panel
- Five year warranty



9018 Block Diagram



RM-9018-A

### Specifications

**Input**  
4-270 Mbit SMPTE 259M-C

**Output**  
4- Analog composite video

**Frequency Response**  
0-5 MHz +/- 0.25 dB

**SNR**  
> 70 dB

**Chroma Luma Delay**  
< 2 nS

**Power**  
8 watts

**Indicators**  
Data lock – 1 per converter

### Ordering Information

**9018** Quad Monitoring Converter- SDI to Analog Composite

**RM-9018-A** Rear I/O Module (Single Slot)-Ch A: 1 Output,-Ch B: 1 Output,-Ch C: 2 Outputs,-Ch D: 2 Outputs

