CLEAN UP Your SDI Signal

SDI REDISTRIBUTION HUB
RE CLOCKING 3G/HD/SD
1:4 SDI Splitter

Removes Jitter and
Stabilizes SDI Signals

SDI3G421 is ideal for distributing any digital SDI signal to multiple destinations. It supports all standard SMPTE formats ranging from SD, HD and 3G. Lightweight and ruggedized, designed for high temperature & high vibration environments. We only use quality, positive locking, connectors, typically used in aviation environments.

SDI3G421 consumes a fraction of the energy compared to typical consumer and broadcast units. Typical power draw is only 1W 33mA @ 28V! It can be powered by any DC power source ranging from 8 volts all the way up to 70 volts. Thus, it can be used in either 14.5 or 28 volt vehicle or aircraft applications without modification. It is also suitable for 48 volt telecom applications. It passes the DO-160 80 volt surge (load dump test). It also withstands a 600V spike per DO-160.

SDI3G421 has very low EMI. It contains additional noise suppression circuitry in compliance with DO-160 environmental and MIL standards.

The input to SDI3G421 has an extended reach cable equalization circuit that allows operation where others fail.

FEATURES
- SDI Re-Clocking
- Extended Cable Reach
- Lightweight & Compact
- Locking Power Connector
- Built-in Surge Protection
- Very Low Power Consumption
- Low EMI
- Reverse Battery Protection
- Multiple Mounting options
- Designed for compliance with DO-160 & MIL Standards

DO 160G Certified
SDI3G421 has a wide supply operating range: 8 to 70V, optimized for 12 or 28V vehicle operation. Also suitable for 48V Telecom application.

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<tr>
<th>SPECIFICATIONS</th>
<th>DESCRIPTION</th>
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<tr>
<td>SDI VIDEO INPUT</td>
<td>SWITCHABLE BETWEEN SD, HD AND 3 Gb/s SDI</td>
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<tr>
<td>SDI VIDEO OUTPUT</td>
<td>(4) OUTPUTS AUTOMATICALLY MATCH THE SDI VIDEO INPUT</td>
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<tr>
<td>MULTI RATE SUPPORT</td>
<td>AUTO DETECTION OF HD OR STANDARD DEFINITION INPUTS</td>
</tr>
<tr>
<td>RE-CLOCKING</td>
<td>YES</td>
</tr>
<tr>
<td>SIZE (L x W x D) inches</td>
<td>5.035&quot;x 2.150&quot; x 0.950&quot;</td>
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<tr>
<td>WEIGHT Lbs</td>
<td>6.1oz , 6.8oz with supplied MOUNT ANGLES &amp; HARDWARE</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE</td>
<td>-40°C TO +70°C</td>
</tr>
<tr>
<td>STORAGE TEMPERATURE</td>
<td>-55°C TO +85°C</td>
</tr>
<tr>
<td>SUPPLY VOLTAGE</td>
<td>8V TO 70V DC</td>
</tr>
<tr>
<td>POWER SURGE</td>
<td>UP TO 80V PER DO-160 AND 600V SPIKE PER DO-160</td>
</tr>
<tr>
<td>POWER CONSUMPTION</td>
<td>1W 33mA @ 28V TYPICAL, 1.2W 42mA @ 28V MAX</td>
</tr>
<tr>
<td>ESD W/ CONNECTORS ON</td>
<td>15kV HBM</td>
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<tr>
<td>ESD CONNECTORS OFF</td>
<td>6kV HBM, 300V MM, 2kV CDM</td>
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<tr>
<td>CONFORMAL COATING</td>
<td>YES</td>
</tr>
<tr>
<td>ENCLOSURE</td>
<td>POWDER COATED 5052 AIRCRAFT ALUMINUM</td>
</tr>
<tr>
<td>WARRANTY</td>
<td>3 YEAR LIMITED MANUFACTURER’S WARRANTY</td>
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**SDI STANDARDS**

LOCKS ONTO AND RE-CLOCKS THE FOLLOWING STANDARDS:

- SMPTE 424, SMPTE 292 and SMPTE 259-C

SUPPORTS THE FOLLOWING DATA RATE OPERATION:

- 125 Mbps, 270 Mbps, 1.4835 Gbps, 1.485 Gbps, 2.967 Gbps, and 2.97 Gbps.

SUPPORTS ALL PIXEL FORMATS AND FRAME RATES CLOCKED PER ANY OF THE ABOVE STANDARDS INCLUDING:

- 1080p60, 1080i60, 720p60, 720i60, 1080p30, 1080p29, 720x486i59, 1080p25, 1080p50, 1080p59.94, 1080p60 and more.

ADDITIONAL DATA RATE OPERATION

- DVB-ASI at 270 Mbps and MADI at 125 Mbps

SDI VIDEO RATES

- SDI VIDEO CONNECTIONS ARE SWITCHABLE BETWEEN STANDARD DEFINITION AND HIGH DEFINITION.

SDI VIDEO SAMPLING / SDI COLOR PRECISION

- 4:2:2 AND 4:4:4

SDI AUDIO SAMPLING

- STANDARD SAMPLE RATE OF 48kHz AND 24 BIT

SDI COLOR SPACE

- YUV AND RGB

SDI AUTO SWITCHING

- AUTOMATICALLY SYNCS BETWEEN SD SDI, HD-SDI AND 3 Gb/S SDI

MEETS FAA FLAMMABILITY REQS

- MATERIALS INCLUDING CONNECTORS ARE EITHER METALLIC OR PASS UL-94V0.