## CLEAN UP Your SDI Signal

## SDI REDISTRIBUTION HUB RECLOCKING 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

withstands a 600V spike per DO-160.

 SDI Video Input—Switchable between SD, HD and 3 Gb/s SDI.

 SDI Video Output – 4 outputs automatically match the SDI video input.

 Powered active splitter. Buffers, re-clocks & reconditions the signal.

 Application: Anywhere you need to extend or split SDI signals.

applications. It passes the DO-160 80 volt surge (load dump test). It also

SDIG421 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





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

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

SDI STANDARDS	DESCRIPTION
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.