

SDI 3G Re-clocking 1:4 Splitter

(Advance Information)

FEATURES

3G SDI

SDI Re-Clocking

Extended Cable Reach

Lightweight & Compact

Locking Power Connector

Wide Supply Operating Range:
8 to 70V, optimized for 12 or
28V vehicle operation. Also
suitable for 48V Telecom
application.

Built-in Surge Protection

Very Low Power Consumption

Low EMI

Reverse Battery Protection

Multiple Mounting options

Designed for compliance with
DO-160 & MIL Standards



- 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

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 airborne and vehicle environments. Macro-Blue's SDI splitter is not just another splitter. In addition to re-clocking all 4 of its outputs, it is especially designed for harsh environments.

SDI3G421 consumes a fraction of the energy compared to typical consumer and broadcast units. It only draws a maximum of 41 milliamps at 28 volts! 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 is very low EMI. It contains additional noise suppression circuitry for compliance with DO-160 and MIL standards. COTS units are only designed to pass FCC standards. Macro-Blue designed SDI3G421 to pass FAA and MIL standards from the start.

The input to SDI3G421 has an extended reach cable equalization circuit that allows operation where others fail; up to 200m at 3Ghz, up to 400m at 270 Mhz (SD).

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PRODUCT SPECIFICATIONS

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	5.035" x 2.150" x 0.950"
WEIGHT	TBD
OPERATING TEMPERATURE	-40°C TO 85°C OR -40°F TO 185°F
STORAGE TEMPERATURE	-60°C TO 150°C OR -76°F TO 302°F
SUPPLY VOLTAGE	8V TO 70V DC
POWER SURGE	UPTO 80V PER DO-160 AND 600V SPIKE PER DO-160
POWER CONSUMPTION	91mA @ 12V (1.09W), 41mA @ 28V (1.14W), 26mA @ v8V (1.26W)
ESD W/ CONNECTORS ON	15kV HBM
ESD CONNECTORS OFF	6kV HBM, 300V MM, 2kV CDM
ENCLOSURE	POWDER COATED 5052 AIRCRAFT ALUMINUM
WARRANTY	3 YEAR LIMITED MANUFACTURER'S WARRANTY

SDI—125 STANDARDS	DESCRIPTION
SD FORMAT SUPPORT	525/29.97 NTSC, 625/25 PAL
HD FORMAT SUPPORT	1080PsF24, 1080p25, 1080PsF25, 1080p29.97, 1080PsF29.97, 1080p30, 1080PsF30, 1080p50, 1080p59.94, 1080p60
SDI COMPLIANCE	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M AND SMPTE 425M
SDI VIDEO RATES	SDI VIDEO CONNECTIONS ARE SWITCHABLE BETWEEN STANDARD DEFINITION AND HIGH DEFINITION
SDI VIDEO SAMPLING	4:2:2 AND 4:4:4
SDI AUDIO SAMPLING	STANDARD SAMPLE RATE OF 48kHz AND 24 BIT
SDI COLOR PRECISION	4:2:2 AND 4:4:4
SDI COLOR SPACE	YUV AND RGB
SDI AUTO SWITCHING	AUTOMATICALLY SELECTS BETWEEN SD SDI, HD-SDI AND 3 Gb/S SDI