

# 3G/HD-SDI Neo

## For LVDS zoom block cameras



**3G-SDI Neo** converts the native LVDS video signal from camera zoom blocks to **3G/HD-SDI** standard.

Take advantage of a **high quality and uncompressed video stream**.

## FEATURES

- 3G/HD-SDI Output
- Video resolution up to 1080p60
- Ultra-low transmission latency (<1ms)
- UART Communication - RS232/TTL using VISCA
- Setup & Update via UART
- Video mode selection by switches
- Power supply 7V-12VDC<sup>1</sup>
- Automatic LVDS & format camera recognition
- Compatible with latest Sony FCB-EV9500L
- Compatible with latest Tamron MP3010

<sup>1</sup> Refer to camera technical manual for the input power supply

### ○ Staggering image quality

3G/HD-SDI Neo interface board enables to transmit uncompressed high-definition video signals from LVDS zoom cameras to screen and delivers high picture quality.

3G/HD-SDI Neo allows real time and secure HD video transmission over long distances using coaxial cable (100 m+)

### ○ Easy integration

3G/HD-SDI Neo module can be rear-mounted on the camera without hampering the mechanical integration.

3G/HD-SDI Neo conversion board has been expertly designed to offer a robust, industrial and sustainable solution for applications such as **medical imaging, surveillance, machine vision, inspection** that require long life cycle.

### ○ Custom functionalities

Depending on your application, a board-to-board connector available on the module will allow you benefit from custom functionalities<sup>1</sup> including integrated RTC, audio embedded to SDI, additional video input.

<sup>1</sup> Twiga offers off-the-shelf solutions and/or custom designs to meet your needs. Contact us for more details.

## TARGET APPLICATIONS

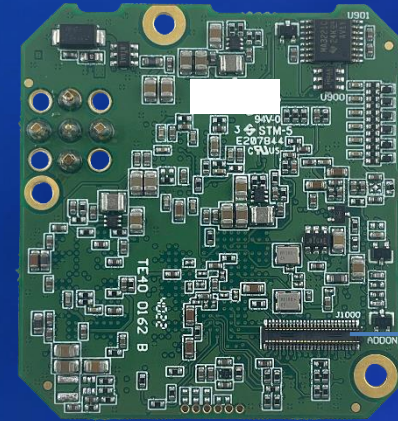
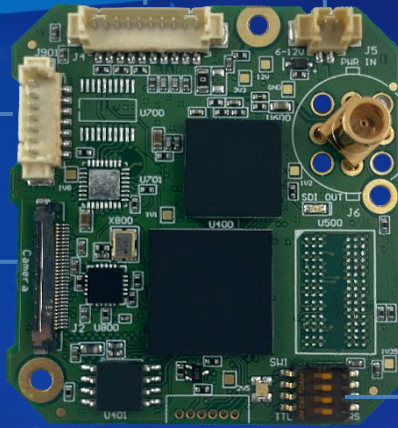


# Onboard Connectors

J4 Analogue HD/SD output + COM	
1	X
2	GND
3	UART-RX
4	UART-TX
5	GND
6	X
7	GND
8	X
9	GNC
10	X

J901 GPIOs	
1	GND
2	Zoom +
3	Zoom -
4	Focus Auto/Manual
5	Focus Near
6	Focus Far
7	Freeze On/Off

**J2** LVDS camera block input



J5 External Power supply	
1	GND
2	7 to 12V DC

**J6** MCX / BNC / SMB compatibility

DIP switches		Configuration		
1	2	3	4	
OFF	/	/	/	RS232
ON	/	/	/	TTL
/	OFF	OFF	OFF	External
/	OFF	OFF	ON	1080p30
/	OFF	ON	OFF	1080p25
/	OFF	ON	ON	1080p60
/	ON	OFF	OFF	1080p50
/	ON	OFF	ON	720p60
/	ON	ON	OFF	720p50
/	ON	ON	ON	720p30

**J1000** Board to board connector  
Extended functionalities

Functions	Specifications
Digital video output	3G/HD-SDI - SMPTE 424 M, HD-SDI 292 M
Video output standard configuration	Switches
Camera control	VISCA – RS232 / TTL level (selectable via switches)
Power supply	7 to 12 VDC
Power consumption	5W (including camera)
Operating temperature range	0°C to 60°C
Storage temperature range	-20°C to 60°C
Regulation	CE EMC compliant, PCB : UL
Dimensions (mm)	48 (H) x 45 (W) x 13 (D)
Weight	15 g

	Mounting kit	Cable kit
30 way USL20-30SS-012-C Cable assembly	✓	✓
2 way cable - power supply	✓	✓
10 way cable - COM	✓	✓
7 way cable - GPIOs	✓	
Right angle black anodized aluminum bracket	✓	
Screws + spacers	✓	
Digital video output connector options	BNC	SMB
	MCX	without connector

