

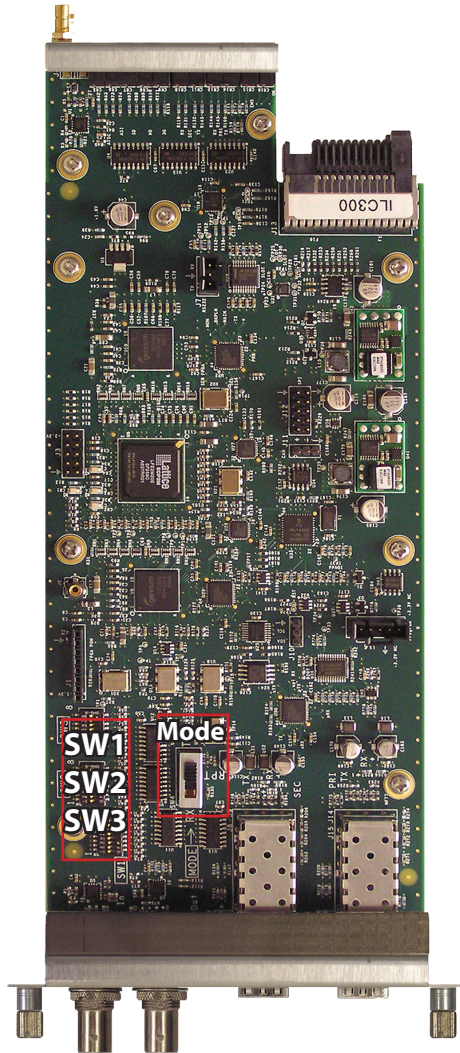


# InfinityLink ILC300 - 3G/HD/SD-SDI, ASI Transmitter/Receiver with Diversity

Artel ships the ILC300 configured as follows:

- Transmitter mode selected
- All signal types allowed
- Electrical input set to BNC
- Standby signal set to Artel non-video standby signal
- SDI Standby set to 525 line (SD-SDI), 59.94 fps (HD/3G)
- Forced bypass is disabled (when forced bypass is enabled, all signal classification, processing, and reclocking is bypassed)
- SDI processing set to No EG34 dithering
- ATSC to ASI conversion is disabled
- SFP alarms are enabled
- Optical reversion is disabled
- Video loss alarm is disabled
- EMS override is enabled (IL Manager can change the ILC300 configuration)

## DIP SWITCH CONFIGURATIONS



### Mode Switch Functions

<b>RX</b>	Receiver Mode
<b>RPT</b>	Repeater Mode (O to O)
<b>TX</b>	Transmitter Mode

### Configuration Switch Functions

<b>SW1</b>	Controls the video rate and forced bypass function settings
<b>SW2</b>	Controls the input source (BNC IN) and operation of the standby video pattern generator
<b>SW3</b>	Controls the following functions: SDI processing, ATSC to ASI video conversion, SFP alarms, optical reversion, video loss alarm, and EMS enable setting

### SW1 Configuration

	Function	Off*	On
S1	<b>3G SDI</b>	Disabled	<b>Enabled</b>
S2	<b>HD-SDI</b>	Disabled	<b>Enabled</b>
S3	<b>SD-SDI</b>	Disabled	<b>Enabled</b>
S4	<b>DVB ASI</b>	Disabled	<b>Enabled</b>
S5	<b>ATSC</b>	Disabled	<b>Enabled</b>
S6	<b>Reserved</b>	-	<b>Must be On</b>
S7	<b>Reserved</b>	-	<b>Must be On</b>
S8	<b>All Others</b>	Disabled	<b>Enabled</b>

\*All SW1 Switches off for bypass mode

**Factory Default: All On**

### SW2 Configuration

S1	S2	S3	Video Source
<b>On</b>	<b>On</b>	<b>On</b>	<b>BNC In</b>
Use IL Manager to set Backplane Source			
Off	On	On	Reserved
Off	Off	On	Reserved
On	Off	Off	Reserved

**Factory Default: All On**

S4	S5	Standby Type
<b>On</b>	<b>On</b>	<b>ARTEL*</b>
Off	On	3G 1080p
On	Off	SD-SDI
Off	Off	HD 1080i

\*Non-video keep-alive signal

	Function	Off	On
S6	<b>Standby Format</b>	625 Line (SD-SDI)	<b>525 Line (SD-SDI)</b>
		50fps (HD/3G)	<b>59.94fps (HD/3G)</b>
S7	<b>Reserved</b>	-	<b>Must be On</b>
S8	<b>Reserved</b>	-	<b>Must be On</b>

**Factory Default: All On**

### SW3 Configuration

	Function	Off	On
S1	<b>Reserved</b>	-	<b>Must be On</b>
S2	<b>EG34 Dither</b>	Enabled	<b>Disabled</b>
S3	<b>ATSC-ASI Conversion</b>	Enabled	<b>Disabled</b>
S4	<b>Reserved</b>	-	<b>Must be On</b>
S5	<b>SFP Alarm</b>	Disabled	<b>Enabled</b>
S6	<b>Optical Reversion</b>	Enabled	<b>Disabled</b>
S7	<b>Alarm On Loss of Video</b>	Enabled	<b>Disabled</b>
S8	<b>EMS Override</b>	Local Control	<b>Remote Control</b>

**Factory Default: All On**



## ILC300 FRONT PANEL LEDs

LED	Function	Color	Description
OK	ILC300 Module Status	OFF	If power is applied to the system, an internal fault may exist
		● Green	Normal operation
		● Yellow	A temperature alarm is indicated if the RX LED is not flashing yellow
		● Red	The TX or RX LEDs may indicate the cause of the alarm. Loss of video if the video alarm is enabled. Video rate is not locked. 1 The corresponding signal rate LED will flash red. Possible internal error
EMS	IL Manager System Status	OFF	The ILC300 module is in local mode and its configuration is controlled by the onboard configuration switches
		● Green	The ILC300 module is in remote mode and the configuration has been set by IL Manager. When in remote mode, the actual configuration of the module will likely not match the settings of the configuration switches and changing the configuration switches will have no effect on the module's operation
TX2	Transmitter (PRI & SEC)	OFF	Receiver mode is selected or the corresponding PRIMARY or SECONDARY SFP is not installed
		● Green	Normal TX operation (input signal present)
		● Yellow	Standby operation (signal from the standby generator)
		* Red	No SFP is installed in either socket or an SFP TX failure exists
RX2	Receiver Status (PRI & SEC)	OFF	Transmitter mode is selected or the corresponding PRIMARY or SECONDARY SFP is not installed
		● Green	Normal RX operation (input signal is present)
		● Yellow	143 Mb PRBS non-video standby signal detected
		* Yellow	Receive optical power is high
		* Red	Low light, loss of SFP RX signal, the PRIMARY and SECONDARY SFP sockets are both missing SFPs, or an SFP RX failure exists
3G	2.97Gb/s Status	OFF	3G signal is not detected
		● Green	3G signal is received or transmitted
		● Yellow	3G signal is detected and is processed <sup>3</sup> w/EG34 dithering
		● Red	3G signal is detected and blocked
		* Red	Video rate is unlocked <sup>1</sup>
HD	1.485 Gb/s SDI Signal Status	OFF	HD signal is not detected
		● Green	HD signal is received or transmitted
		● Yellow	HD signal is detected and is processed <sup>3</sup> w/EG34 dithering
		● Red	HD signal is detected and blocked
		* Red	Video rate unlocked <sup>1</sup>
SD	270 Mb/s SDI Signal Status	OFF	SD signal is not detected
		● Green	SD signal is received or transmitted
		● Yellow	SD signal is detected and is processed <sup>3</sup> w/EG34 dithering
		● Red	SD signal is detected and blocked
		* Red	Video rate unlocked <sup>1</sup>
ASI	ASI Signal Status	OFF	ASI signal is not detected
		● Green	ASI signal is being received or transmitted
		● Yellow	ASI signal is detected and is processed <sup>3</sup> w/EG34 dithering
		● Red	ASI signal is detected and blocked
		* Red	Video rate unlocked <sup>1</sup>
ATSC	SMPTE 310 19.39 Mb/s ATSC Signal Status	OFF	SMPTE 310 19.39 Mb/s ATSC signal is not detected
		● Green	SMPTE 310 19.39 Mb/s ATSC signal is received or transmitted
		● Yellow	SMPTE 310 19.39 Mb/s ATSC signal is detected and is being converted to ASI
		● Red	SMPTE 310 19.39 Mb/s ATSC signal is detected and blocked

### Footnotes

- A video rate unlocked condition usually indicates that the input signal rate is outside the standard rate requirements. The input signal rate requirements are as follows:
  - SDI/ASI rates must be 270 Mb/s +/- 100 ppm
  - HD SDI rate must be 1.485 Mb/s or 1.485/1.001 Mb/s +/- 50 ppm
  - 3G SDI rate must be 2.97 Gb/s or 2.97/1.001 Gb/s +/- 50 ppm
If the signal cannot be held within these requirements, try setting the ILC300 to bypass mode
- When the ILC300 is in repeater mode, the TX and RX status LEDs are active to represent the simultaneous receive and transmit operations occurring
- Depending on the operating mode of the ILC300, it processes the signal as follows:
  - Transmitter mode—Dithered
  - Receiver mode—Undithered
  - Repeater mode—The optical transmit signal is an unmodified (but reclocked) copy of the optical receive signal. The electrical BNC output and monitor output is undithered if SW3-2 is OFF, otherwise these outputs are dithered.
(The optical transmit signal is an unmodified copy of optical receive signal). If a ILC300 in receiver mode is set to undither and an undithered SDI or ASI signal is received, the signal will be output normally, without dithering.

\* Flashing yellow | \* Flashing red

## Install SFPs



Optical redundancy is enabled with installation of secondary SFP (as shown)

## Sales



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