



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

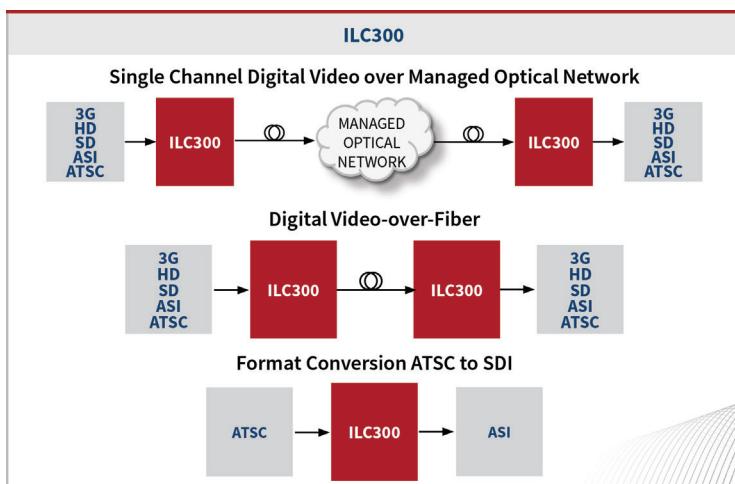


**The ILC300 is a flexible fiber optic transport module for all digital video formats from 19.39Mb/s (ATSC) to 2.97Gb/s (3G-SDI). The ILC300 is a single-module, user configurable to function as a transmitter, receiver, or repeater, and supports route diversity as well as ATSC to DVB-ASI conversion.**

The ILC300 incorporates numerous features in a flexible, easy-to-deploy and configure module with unparalleled quality and reliability. The module optically transports all digital formats from 19.39Mb/s ATSC to 3G-SDI (SMPTE 424M). To minimize inventory costs and simplify deployment, it can be configured as a receiver, transmitter, or repeater. For route diversity and optical flexibility the ILC300 also features dual optical SFP modules available in

WDM, CWDM, or DWDM optical wavelengths. To transport across metro optical amplified networks, dithering of all SDI formats has been included, as well as conversion of ATSC from SMPTE 310M to DVB-ASI.

Cost-effective, flexible, and reliable, the ILC300 continues Artel's tradition of making the world's most innovative and reliable video over optical transport hardware.



### FEATURES

#### Single card configurable as:

- Transmit (electrical to optical)
- Receive (optical to electrical)
- Repeater (optical to optical)

#### Automatic rate selection of all digital video formats

- 2.967Gb/s 3G-SDI (SMPTE 424M)
- 1.485Gb/s HD-SDI (SMPTE 292M)
- 270Mb/s
  - SD-SDI (SMPTE 259M-C, ITU 656)
  - SDTI (SMPTE 305M)
  - DVB-ASI
- 19.39Mb/s ATSC (SMPTE 310M)

#### Dual SFPs for route diversity

- Operates with one or two SFPs
- Separate fault alarms for each SFP
- Receive via primary or secondary SFP
- Automatic switchover upon loss of signal
- User selectable reversion to primary SFP

#### Optional dithering of all SDI formats

- Dithering per SMPTE EG-34 for use with DWDM optics

#### Convert ATSC to DVB-ASI

- Transmitter only

#### Interoperates with

- Other InfinityLink modules
- ITU 694.1 or 694.2 optical multiplexers

#### Flexible multi-purpose repeater for:

- ILC103A, ILC150E, ILC170, ILC274

#### Non-video standby signal on loss of video input

#### Video test or standby signal generator for SDI formats

#### Externally accessible SFP transceiver optics

- Optical budget to 33dB
- WDM (1310nm, 1550nm)
- CWDM ITU G.694.2 (Channels 27-61)
- DWDM ITU G.694.1 (Channels 21-60)

#### Inputs/outputs

- Optical via SFPs
- Electrical via 75 Ohm BNC
- Input from and output to other modules in InfinityLink chassis

#### Multiple monitoring options

- Front panel monitoring of transported signal
- Front and rear panel status LEDs

#### Remote management via InfinityLink Manager

- No external software required
- HTTP or SNMP v2
- Monitor
- Configure
- Upgrade firmware

## SPECIFICATIONS

### Environmental

Operating temperature	0 to 50°C
Ambient storage temperature	-40 to 80°C
Relative humidity	10 to 95% (non-condensing)
Power dissipation	13 Watts

### Physical

Dimensions	0.8" x 5" x 10.8"
	1 slot in InfinityLink chassis

### Electrical Interface

Signal Formats	
- 2.967Gb/s	
- 3G-SDI (SMPTE 424M)	
- 1.485Gb/s	
- HD-SDI (SMPTE 292M)	
- 270Mb/s	
- SD-SDI (SMPTE 259M-C, ITU 656)	
- SDTI (SMPTE 305M)	
- DVB-ASI	
- 19.39Mb/s	
- ATSC (SMPTE 310M))	
Signal polarity	Non inverting
Channels	1-transmit, receive or repeat
Connectors	
Input (1)	BNC 75 Ohm
Output (1)	BNC 75 Ohm
Monitor	mini 75 Ohm SMB
Return loss (input, output, monitor)	>15 dB, 5-1485 MHz >10dB, 1485-2970 MHz
Cable equalization for Belden 1694A	0 to 250 meters (270Mb/s) 0 to 100 meters (1.485Gb/s) 0 to 100 meters (2.967Gb/s)

### Optical Protection Modes

Transmit	Transmit same signal on each SFP
Receive	Primary and secondary SFP sockets Automatic switchover upon loss of signal User selectable reversion to primary SFP

### SDI test or standby signal formats

SD-SDI	525i/29.97	625i/25
HD-SDI	1080i/29.97	1080i/25
3G-SDI	1080p/29.97	1080p/25

### SDI Signal Processing (3G-SDI, HD-SDI and SD-SDI)

Optional LSB dithering per SMPTE EG-34

### Optical Interface

Artel Video SFP	See SFP Specification
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### Regulatory Conformance

Compliance:	CSA 60950, EN60950, EN55022 FCC Part 15 (Class A), CISPR 22
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UPDATED 11/04/2016

All specifications subject to change without notice. ©2016



### Ordering Information

#### ILC300 Function Module

Model	Description	Part #
ILC300	3G/HD/SD-SDI, ASI Transmitter/ Receiver with Diversity	390-006120-00

#### SFP Options

See SFP/SFP+/XFP compatibility chart

#### Monitor Cable

DL100MC-72      Monitor cable, 75 Ohm mini-SMB to BNC, 72'L



Front panel monitoring and status displays



Rear panel Includes electrical input or output  
and dual SFP transceiver cages

### Sales



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