

DigiLink DLC103A - 3G Multi-Rate Digital Video Optical Transmitter/Receiver/ Transceiver/Repeater

Artel ships the DLC103A configured as follows:



• Transmit source: BNC

• TX 3G operation: Enabled

• RX 3G: Enabled

• TX reclock: Auto

• RX reclock: Auto

• Signal at OUT 1: Same as OUT 2 and OUT 3

• SFP Alarms: Enabled

• Video loss alarm: Disabled

• EMS override: Enabled

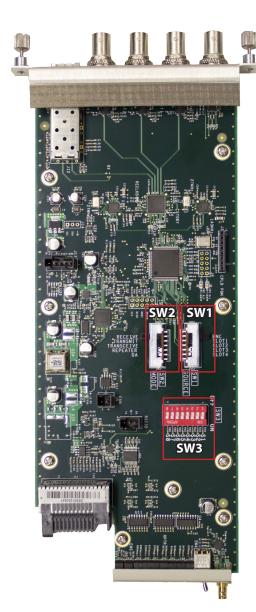
SW2 Mode Switch Configurations

Setting	DLC103A Module	Ele	ctrical Si	ignal		Optica	l Signal
		IN	OUT1	OUT2	OUT3	RX	TX
RECEIVE	Receives optical signals only. The SFP laser used to transmit signals is turned off and the transmit alarms are disabled.		Х	Х	Х	X	
TRANSMIT	Transmits signals only. The SFP receiver and receive alarms are disabled.	Х	Х	Х	Х		Х
TRANSCEIVE	Receives and transmits signals. The SFP laser, SFP receiver, and associated alarms are enabled.	Х	Х	Х	Х	Х	Х
REPEATER	Reclocks the received optical signal and transmits the signal back out. The optical receive signal is also available on the electrical outputs.		х	х	X	Х	Х
DA	Distributes the electrical input signal to all three electrical outputs and the optional SFP transmitter. ¹	Х	Х	Х	X		Х

1. If the SFP is not installed, there is no SFP alarm. If it is installed, the input signal is sent to SFP TX.

SW3 DIP Switch Configurations

	Function	ON	OFF		Function	ON	OFF
S1	TX 3G	Enabled	Disabled	S5	OUT 1 Signal	Same as Out2/Out3	Same as SFP TX
S2	RX 3G	Enabled	Disabled	S6	SFP Alarm	Enabled	Disabled
S3	TX Reclock	Auto	Bypass	S7	Video Loss Alarm	Disabled	Enabled
S4	RX Reclock	Auto	Bypass	S8	EMS Override	Remote Control	Local Control



SW1 Transmit Source Switch Configurations

Setting	Input Source
BNC	BNC IN
SLOT1	Chassis slot 1
SLOT2	Chassis slot 2
SLOT3	Chassis slot 3
SLOT4	Chassis slot 4



Install SFP



■ DLC103A FRONT PANEL LEDS

LED)	Function	Color	Description					
			OFF	If power is applied to the system, an internal fault with the DLC103 may exist.					
		Module Status	Green	Normal operation.					
OK	Yellow		If the RX LED is not flashing yellow, then a temperature alarm is indicated.						
		Status	Red	The TX or RX LEDs may indicate the cause of the alarm or the alarm condition can indicate an internal error. 1					
EMS		DigiLink Manager System Status	OFF	The DLC103A module is in local mode and its configuration is controlled by the onboard configuration switches.					
			Green	The DLC103A module is in remote mode and the configuration has been set by the DigiLink Manager EMS. 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.					
		270Mb/s SDI, ASI (and 2.97Gb/s) Status	OFF	SDI/ASI signal is not detected (also 3G signal not detected).					
	SD		Green	SD/ASI signal is detected (or 3G signal detected when HD LED is also Green).					
TX			Red	3G signal is detected, but blocked (when TX HD LED is also Red). ²					
17		1.485 Gb/s SDI (and 2.97Gb/s) Status	OFF	HD signal is not detected (also 3G signal not detected).					
	HD		Green	HD signal is detected (or 3G signal detected when TX SD LED is also Green).					
			Red	3G signal is detected, but blocked (when TX SD LED is also Red). ²					
		Transmitter Status	OFF	Receiver mode is selected.					
TX			Green	Normal TX operation (input signal is present). An unknown rate is indicated if the TX SD and TX HD LEDs are off.					
			Yellow	Standby operation (no input signal).					
			* Red	No SFP is installed or an SFP failure exists. ³					
DDTI	RPTR	Repeater Status	OFF	Repeater mode is not selected.					
KPII	ĸ	Repeater Status	Green	Repeater mode is selected.					
			OFF	Transmitter mode is selected.					
		Receiver Status	Green	Normal RX operations (input signal is present). An unknown rate is indicated if the RX SD and RX HD LEDs are off.					
RX	Yellow		Standby signal is detected.						
			* Yellow	Receive optical power is high.					
		* Red	Low light, loss of SFP RX signal, or an SFP failure exists. ³						
SD RX HD		270Mb/s SDI, ASI (and 2.97Gb/s) Status	OFF	SDI/ASI signal is not detected (also 3G signal not detected).					
	SD		Green	SD/ASI signal is detected (or 3G signal detected when HD LED is also Green).					
			Red	3G signal is detected, but blocked (when RX HD LED is also Red). ²					
		1.485 Gb/s SDI	OFF	HD signal is not detected (also 3G signal not detected).					
	HD	D (and 2.97Gb/s) Status	Green	HD signal is detected (or 3G signal detected when RX SD LED is also Green).					
			Red	3G signal is detected, but blocked (when RX SD LED is also Red). ²					

- 1. Red OK LED can also indicate loss of video when the Video Loss Alarm is enabled.
- 2. A 3G input signal is blocked when a non-3G SFP is installed or when SW3:S1 (TX 3G) or SW3:S2 (RX 3G) is set to OFF.
- 3. TX and RX LEDs flashing red together indicates that no SFP is installed or that an unsupported SFP is installed (for example, a non-video DWDM SFP).
- *Flashing green | *Flashing yellow | * Flashing red



