

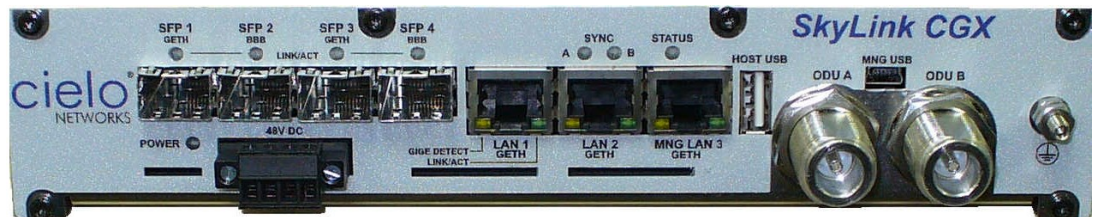
SkyLink CGX

Ultra Low Latency PTP Radio System

Delivering Scalable Bandwidth Licensed Microwave Solutions

Features

- Licensed band PTP digital microwave system for all FCC/NTIA/ETSI bands at 6/7/8/11/13/15/18/23/26/39 GHz
- Payload: 4xSFP and 3x1000BaseT for low latency operation
- Scalable GigE IP bandwidth - 15 to 310 Mbps Ethernet
- BBB Mode Operation Support for lowest latency operation
- Scalable modulation - QPSK/16QAM/32QAM/64QAM/128QAM/256QAM
- End Unit Single, End Unit Dual, and Repeater Mode supported
- Ultra Low Latency Operational Modes
- Advanced forward error correction techniques for improved link performance
- Common compatible IDU for all ODU RF bands
- Compact IDU size of one RU height & one half 19-inch rack width
- SNMP remote management
- User friendly Web GUI management solution



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Technical Specifications

SkyLink CGX

General Information	6 GHz	7 GHz	8 GHz	11 GHz	13 GHz	15 GHz	18 GHz	23 GHz	26 GHz	38 GHz
Frequency Range	5.9 - 7.1 GHz	7.1 - 7.9 GHz	7.9 - 8.5 GHz	10.7 - 11.7 GHz	12.7 - 13.2 GHz	14.4 - 15.4 GHz	17.7 - 19.7 GHz	21.2-23.6 GHz	24.5-26.5 GHz	37.0-40.0 GHz
T-R Spacing	240/252.04/340 MHz	154/160/161/168/196/245/300 MHz	119/126/151.614/208/266/310/311.32/360 MHz	490/530 MHz	266 MHz	315/322/420/475/490/640/644/728 MHz	1008/1010/1092.5/1120/1560 MHz	1008/1200/1232 MHz	800/1008 MHz	700/1260 MHz
RF Channel Spacing	14/28/30/40/56 MHz	14/28/40/56 MHz	14/28/40/56 MHz	14/28/56 MHz	14/28/56 MHz	14/28/56 MHz	13.75/27.5/55 MHz	14/28/56 MHz	14/28/40/56 MHz	14/28/56 MHz
Frequency Accuracy	7 PPM									

Radio Information	6 GHz						7/8 GHz					
Modulation	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM
Transmit Power	30 dBm	28 dBm	28 dBm	24 dBm	24 dBm	24 dBm	30 dBm	28 dBm	28 dBm	24 dBm	24 dBm	23 dBm
Receiver Sensitivity (BER 10e-6)	-80 dBm	-77 dBm	-75 dBm	-70 dBm	-67 dBm	-64 dBm	-80 dBm	-77 dBm	-75 dBm	-70 dBm	-67 dBm	-64 dBm
Receiver Overload (BER 10e-6)	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm

Radio Information	11 GHz						13/15 GHz					
Modulation	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM
Transmit Power	28 dBm	26 dBm	26 dBm	21 dBm	21 dBm	20 dBm	26 dBm	24 dBm	24 dBm	20 dBm	20 dBm	18 dBm
Receiver Sensitivity (BER 10e-6)	-80 dBm	-77 dBm	-74 dBm	-71 dBm	-69 dBm	-64 dBm	-83 dBm	-78 dBm	-74 dBm	-71 dBm	-69 dBm	-64 dBm
Receiver Overload (BER 10e-6)	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm

Radio Information	18 GHz						23 GHz					
Modulation	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM
Transmit Power	25 dBm	22 dBm	22 dBm	17 dBm	17 dBm	17 dBm	25 dBm	22 dBm	22 dBm	17 dBm	17 dBm	17 dBm
Receiver Sensitivity (BER 10e-6)	-87 dBm	-80 dBm	-73 dBm	-70 dBm	-68 dBm	-65 dBm	-86 dBm	-80 dBm	-74 dBm	-71 dBm	-69 dBm	-65 dBm
Receiver Overload (BER 10e-6)	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm

Radio Information	26 GHz						38 GHz					
Modulation	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM	QPSK	16QAM	32QAM	64QAM	128QAM	256QAM
Transmit Power	25 dBm	22 dBm	22 dBm	17 dBm	17 dBm	17 dBm	21 dBm	18 dBm	18 dBm	14 dBm	14 dBm	14 dBm
Receiver Sensitivity (BER 10e-6)	-85 dBm	-80 dBm	-74 dBm	-71 dBm	-69 dBm	-65 dBm	-81 dBm	-75 dBm	-71 dBm	-69 dBm	-66 dBm	-62 dBm
Receiver Overload (BER 10e-6)	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm	-20 dBm	-20 dBm	-20 dBm	-23 dBm	-23 dBm	-23 dBm

		Capacity Bandwidth							
		Modulation	QPSK	16QAM	32QAM	64QAM	128QAM	256 QAM	
RF Channel Size	14 MHz		21 Mbps	43 Mbps	53 Mbps	65 Mbps	77 Mbps		
	28 MHz		44 Mbps	89 Mbps	112 Mbps	134 Mbps	157 Mbps		180 Mbps
	30 MHz		47 Mbps	97 Mbps	121 Mbps	145 Mbps	170 Mbps		193 Mbps
	40 MHz		62 Mbps	123 Mbps	152 Mbps	186 Mbps	220 Mbps		250 Mbps
	56 MHz		85 Mbps	171 Mbps	217 Mbps	266 Mbps	314 Mbps		360 Mbps

Payload

Ethernet/BBB Mode: 21 to 360 Mbps

Physical Interfaces

4xSFP Slot (1Gbps/2.5Gbps)
 2xRJ-45 10/100/1000Base-TX
 1xRJ-45 10/100/1000Base-TX (NMS or User)

Modem

IDU: 2 x N - Female
 ODU: N - Female
 Frequency: TX: 350 MHz / RX: 140 MHz

Power

Input Voltage (-48VDC): -36 to -72 VDC
 Consumption: 30W (IDU), 55W (per ODU)

Management

Remote Access

SNMP V2, V3
 Web-Based GUI (HTTP/HTTPS)
 Telnet - Command Line Interface

Local Access

Serial: Command Line Interface
 Interface: USB

Topology

Out-of-Band Management with embedded switch

Environmental

Indoor Unit

Operating Temperature: -5° to +45°C
 Relative Humidity: 0 to 95%, non-condensing

Outdoor Unit

Operating Temperature: -33° to +55°C
 Relative Humidity: 0 to 100%

Mechanical

Indoor Unit

Size: 8.5W x 1.7H x 9.8D inches (1RU)
 Weight: 4.9 pounds

Outdoor Unit - 6 GHz

Size: 10.5 diameter x 3.5 deep inches
 Weight: 10.1 pounds

Outdoor Unit - All other freq bands

Size: 10 diameter x 3.6 deep inches
 Weight: 8.6 pounds



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