

Evolution XLC-11 Line Card



The Evolution XLC-11 line card features one modulator and one demodulator operating in either DVB-S2/ACM or iNFINITI TDM mode on the outbound. It supports TDMA with extremely efficient inbound FEC with 2D 16-State coding, making it ideally suited for voice, video and data applications in enterprise and mobility networks.

Network Configuration

Modem	One Modulator (Transmit one downstream carrier), One Demodulator (Receive one upstream carrier)	
	Downstream	Upstream
	<u>DVB-S2/ACM or (iNFINITI TDM)</u>	<u>ATDMA*</u>
Modulation	QPSK, 8PSK, 16APSK (BPSK, QPSK, 8PSK)	BPSK, QPSK, 8PSK
FEC	LDPC, 1/4–8/9 (TPC, 0.495–0.879)	TPC**, 0.431–0.793 2D 16-State 1/2-6/7 (DVB-S2 mode only)
Maximum Carrier Rates	Symbol Rate	45 Msps (15 Msps)
	Info Rate	150 Mbps ¹ (21 Mbps ²)
	IP Data Rate	149 Mbps ¹ (20 Mbps ²)
	Notes:	¹ 16APSK, 8/9 FEC ² QPSK, .879 FEC ³ 8PSK, 438 6/7 FEC
		<i>Maximum downstream and upstream data rates cannot be achieved simultaneously Maximum rates are achieved under optimal conditions</i>
Spread Spectrum	Chip Rate	(TDM: Up to 15 Mcps)
	Spreading Factor	(TDM: 2, 4, 8)
Interoperability	Compatible with Series 15000 Universal Hub (51F/20Slot) chassis and Series 12000 Universal Hub (4-slot) Requires iDX 2.0 software or above	

Interfaces

SatCom Interfaces***	TxIF: Type-F, 950–2000 MHz, +5dBm/-35dBm RxIF: Type-F, 950–2000 MHz, -5dBm (max) composite/ -130+10*log(Fsym)dBm (min) single carrier
Data Interfaces	LAN: RJ-45 Two 100/1000Base-T, one 10/100Base-T RS-232: RJ-45 (console connection)

Mechanical/Environmental

Redundancy	Software Controlled, Hot-Swappable, and Auto-Failover
Weight	~1.2 lbs (0.6 Kg)
Operating Temperature	0° to +45°C (+32° to +113°F)
Certification (System Level)	FCC, CE, and RoHS Compliant

* The modulation and FEC coding of the assigned carrier cannot be changed by the system software automatically. Superburst acquisition is not supported.

** TPC not supported for use with DVB-S2 outbound in iDX 3.0 and above

*** Evolution 3.3 and above (prior to Evolution 3.3, TxIF/RxIF = 950-1700 MHz)

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Specifications are subject to change without notice