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

		Downstream DVB-S2/ACM or (iNFINITI TDM)	*Upstream* ATDMA*
Modem	One Modulator (Transmit one downstream carrier), One Demodulator (Receive one upstream carrier)		
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)	7.5 Msps
	Info Rate	150 Mbps[1] (21 Mbps[2])	19.2 Mbps[3]
	IP Data Rate	149 Mbps[1] (20 Mbps[2])	16 Mbps[3]
	Notes:	[1]16APSK, 8/9 FEC [2]QPSK, .879 FEC [3]8PSK, 438 6/7 FEC *Maximum downstream and upstream data rates cannot be achieved simultaneously* *Maximum rates are achieved under optimal conditions*	
Spread Spectrum	Chip Rate	(TDM: Up to 15 Mcps)	Up to 7.5 Mcps
	Spreading Factor	(TDM: 2, 4, 8)	1, 2, 4, 8, and 16
Interoperability	Compatible with Series 15000 Universal Hub (5IF/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)
Radio Standards (System Level)	EN 301-428 v1.3.1 — Ku-band System Level Specification EN 301-443 v1.3.1 — C-band System Level Specification
Safety Standard (System Level)	Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03
Emission Standard (System Level)	Complies with EN 55022 Class A, FCC Part 15 Class A, CISPR 22 Class A, EN 61000-3-2, EN 61000-3-3
EMC/Immunity Standard (System Level)	Complies with EN 55024, EN 301-489-1, EN 301-489-12, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11
Certification	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)

Specifications are subject to change without notice

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