

## 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

<b>Modem</b>	One Modulator (Transmit one downstream carrier), One Demodulator (Receive one upstream carrier)		
	<b>Downstream</b> DVB-S2/ACM or (iNFINITI TDM)	<b>Upstream</b> ATDMA*	
<b>Modulation</b>	QPSK, 8PSK, 16APSK (BPSK, QPSK, 8PSK)	BPSK, QPSK, 8PSK	
<b>FEC</b>	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)	
<b>Maximum Carrier Rates</b>	Symbol Rate	45 Msps (15 Msps)	7.5 Msps
	Info Rate	150 Mbps <sup>1</sup> (21 Mbps <sup>2</sup> )	19.2 Mbps <sup>3</sup>
	IP Data Rate	149 Mbps <sup>1</sup> (20 Mbps <sup>2</sup> )	16 Mbps <sup>3</sup>
	Notes:	<sup>1</sup> 16APSK, 8/9 FEC <sup>2</sup> QPSK, .879 FEC <sup>3</sup> 8PSK, 438 6/7 FEC <i>Maximum downstream and upstream data rates cannot be achieved simultaneously Maximum rates are achieved under optimal conditions</i>	
<b>Spread Spectrum</b>	Chip Rate	(TDM: Up to 15 Mcps)	Up to 7.5 Mcps
	Spreading Factor	(TDM: 2, 4, 8)	1, 2, 4, 8, and 16
<b>Interoperability</b>	Compatible with Series 15000 Universal Hub (51F/20Slot) chassis and Series 12000 Universal Hub (4-slot) Requires iDX 2.0 software or above		

### Interfaces

<b>SatCom Interfaces***</b>	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
<b>Data Interfaces</b>	LAN: RJ-45 Two 100/1000Base-T, one 10/100Base-T RS-232: RJ-45 (console connection)

### Mechanical/Environmental

<b>Redundancy</b>	Software Controlled, Hot-Swappable, and Auto-Failover
<b>Weight</b>	~1.2 lbs (0.6 Kg)
<b>Operating Temperature</b>	0° to +45°C (+32° to +113°F)
<b>Radio Standards (System Level)</b>	EN 301-428 v1.3.1 — Ku-band System Level Specification EN 301-443 v1.3.1 — C-band System Level Specification
<b>Safety Standard (System Level)</b>	Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03
<b>Emission Standard (System Level)</b>	Complies with EN 55022 Class A, FCC Part 15 Class A, CISPR 22 Class A, EN 61000-3-2, EN 61000-3-3
<b>EMC/Immunity Standard (System Level)</b>	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
<b>Certification</b>	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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