

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

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|------------------------------|---|---|
| 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

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|-----------------------------|--|
| 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

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|-------------------------------------|---|
| 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)

Specifications are subject to change without notice

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