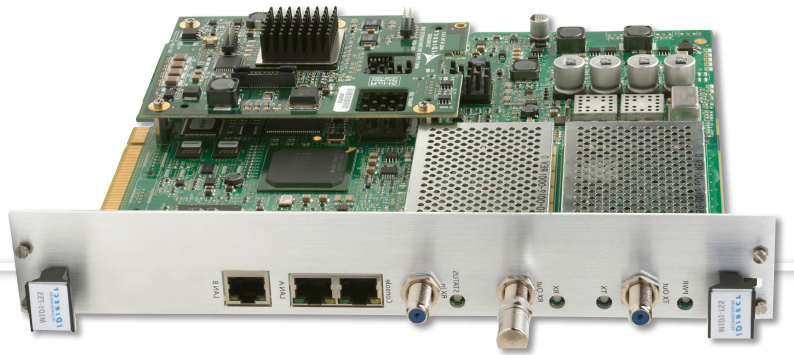


**iNFINITI M1D1-TSS
 Line Card**



The iNFINITI M1D1-TSS line card integrates the latest Spread Spectrum (SS) technology with advanced FIPS-Certified TRANSEC Security and is ideally suited for supporting secure broadband communication links for COTM (Comms-on-the-Move). The modulator/demodulator line cards supports IP data rates of up to 20 Mbps on the outbound and up to 10 Mbps on the inbound and fits in any new or existing universal hub chassis, making network expansion easy.

Network Configuration

Modem	One Modulator (Transmit one downstream carrier) One Demodulator (Receive one upstream carrier)
Symbol Rate (SS)	Downstream: Up to 7.5 Msps* Upstream: Up to 3.75 Msps*
Symbol Rates (Standard)	Downstream (TDM): Up to 15 Msps Upstream (D-TDMA): Up to 7 Msps
Modulation	Downstream (TDM): BPSK (SS), BPSK, QPSK, 8PSK Upstream (D-TDMA): BPSK (SS), BPSK, QPSK, 8PSK
IP Data Rate (SS)	Downstream: Up to 6.5 Mbps Upstream: Up to 2.0 Mbps
IP Data Rates (Standard)	Downstream (TDM): Up to 20 Mbps (when using QPSK, 0.879FEC) Upstream (D-TDMA): Up to 10 Mbps (when using QPSK, 0.793FEC, unrestricted NMS)
FEC	Downstream: Turbo BPSK(SS) .495-.879, BPSK .495-.879, QPSK .495-.879, 8PSK .793-.879 Upstream: Turbo BPSK(SS) .431-.660, BPSK .431-.793, QPSK .533-.793, 8PSK .660
Interoperability	Designed for use with Series 15000 Universal Hub (51F/20Slot) chassis and Series 12100 Universal Hub (Commercial 4-slot) chassis Compatible with Series 12200 Universal Hub (Industrial 4-slot) chassis** Requires iNFINITI Series 8350 remotes

Interfaces

SatCom Interfaces	TxIF: Type-F, 950-1700 MHz, +7dBm/-35dBm RxIF: Type-F, 950-1700 MHz, -5dBm/-65dBm
Data Interfaces	LAN: RJ-45, two 10/100Base-T RS-232: RJ45 (Console connection)
Security	TRANSEC with FIPS 140-2 certification
10 MHz Reference	10 MHz reference to BUC and LNB

Mechanical/Environmental

Redundancy	Software Controlled, Hot-swappable
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 Standards (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

* rates vary based on spreading factor

** M1D1-TSS line card does not meet industrial-grade specifications of Series 12200 Industrial 4-slot chassis