iConnex e800
Satellite Router Board
Models e800, e800-FIPSL2

iConnex e800 shown

Configuration

Network Topology	Star, Mesh and iSCPC		
Modulation	Downstream DVB-S2/ACM QPSK, 8PSK, 16APSK	Downstream iNFINITI TDM BPSK, QPSK, 8PSK	Upstream D-TDMA or (SCPC Return*) BPSK, QPSK, 8PSK (BPSK, QPSK, 8PSK)
FEC	LDPC, 0.25–0.9	TPC, 0.431–0.879	TPC**, 0.431–0.793, 2D 16-State (2D 16-State)
Maximum Carrier Rates	Symbol Rate 45 Msps Info Rate 150 Mbps[1] Line Card IP Data 149 Mbps[1] Remote IP Data 38.5 Mbps[1]	15 Msps 21 Mbps[2] 20 Mbps[2] 17 Mbps[3]	7.5 Msps (15 Msps) 12.8 Mbps[4] (24 Mbps[5]) 11.1 Mbps[4] (20 Mbps[5]) 11.1 Mbps[4] (20 Mbps[5])

Notes: [1] 16APSK 8/9 FEC;   [2] QPSK, .897 FEC;   [3] QPSK, .793 FEC;   [4] QPSK 6/7 FEC;   [5] QPSK 4/5 FEC

Maximum downstream and upstream data rates cannot be achieved simultaneously
Maximum rates are achieved with optimal configurations

Spread Spectrum	Spreading Factor Max Rate (Mcps)	2, 4 and 8 7.5 Mcps	1, 2, 4, 8, 16 (SCPC R: 2, 4, 8) 7.5Mcps (SCPC R: 15 Mcps)

Interfaces

SatCom Interfaces	TX Out: Type-F, 950–2000 MHz, Composite Power +7dBm/-35dBm RX In: Type-F, 950–2000 MHz, Composite Power 0dBm/-65dBm RX Out: Type-F, 950–2000 MHz Software controllable 10 MHz reference on TX Out and RX In ports
Available BUC Power (IFL)	+24V (Optional +48V supports up to 16W Ku-band or 20W C-band)
Available LNB Power (IFL)	+13V, +14V, +15V, +18V, +19V or +20V
Data Interfaces	LAN: Two 10/100 Console: Console connection RS-232: GPS input or Antenna Control Signaling 10 MHz: External reference clock (*future release*) USB: External media access (*future release*)
Protocols Supported	TCP, UDP, ICMP, IGMP, RIP v2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, cRTP and GRE
Security	AES Link Encryption (256-bit), TRANSEC (iNFINITI and S2 modes), FIPS 140-2 Level 2 Compliant*** (optional), x.509 digital certificates authentication, Automatic Key Management
Traffic Engineering	Group QoS, QoS (Priority Queuing and CBWFQ), Strict Priority Queuing, Application Based QoS, Minimum CIR, CIR (Static and Dynamic), Rate Limiting
Other Features	Built-in Automatic Uplink Power, Frequency and Timing Control (star and mesh), Authentication, Antenna Control Interface (OpenAMIP)

Mechanical/Environmental

Size	W 9.525 in x D 11.2 in x H 0.6 in (W 24.19 cm x D 28.45 cm x H1.52 cm)
Weight	Model e800: 1.3 lbs (0.59 Kg) Model e800-FIPSL2: 2.1 lbs (0.95 Kg)
Operating Temperature	-10° to +60°C (14° to +140°F) at Sea Level -10° to +55°C (14° to +131°F) at 10000 feet (3048m)
Altitude	Operational: Up to 10,000 feet (3048m); Storage: up to 30,000 feet (9144m)
Relative Humidity	Max 95% with non-condensing humidity (operational) Max 100% with condensing humidity (storage)
Input Voltage	+24V or +48V DC
Certification	RoHS Compliant

* SCPC Return can only be operated when using DVB-S2/ACM*
*** TPC not supported for use with DVB-S2 outbound in iDX 3.0 and above*
****Certification pending*