



# KNIGHT SKY

*Above the Cloud....*

*Connecting and Protecting*



## Chameleon Outdoor Satellite Network Solution

### Outdoor Satellite Network Solution

Knight Sky's Chameleon provides a complete integrated modem and network appliance ready to be deployed in any environment and provide all necessary user services. The fully outdoor-rated and MIL-STD ruggedized unit includes a VSAT modem, Enterprise IP router and VoIP PBX to deliver a comprehensive suite of communications services.

### Chameleon Features and Benefits

- **Ruggedized Outdoor Enclosure** — built for field operations, the Chameleon is fully IP65 rated and built to MIL-STD qualifications for temperature, humidity, shock and vibration. This allows it to be deployed in virtually any environment and provide a full range of network access to users wherever they need to operate. Chameleon's small size reduces the transport and installation footprint typically required to deliver networked communications.
- **Flexible Deployment Options** – Chameleon was built to be flexible because communications needs in the field are constantly changing. The unit can be configured with one of several different VSAT modem options and a fully functional IP router that provides 2 Ethernet ports, each of which can be configured as LAN ports (to connect user equipment) or WAN ports (to interface with other networks). More importantly, the Ethernet ports can also be configured to provide Power-Over-Ethernet (PoE), thus eliminating power cables for attached VoIP phones and Wireless Access Points. In addition, Chameleon can be utilized with virtually any VSAT terminal providing L-Band, Ethernet and Serial interfaces allowing communications with manual and auto-point antenna systems. FlyAway, Vehicle Mount, Fixed or COTM configurations are supported to meet the full range of operating scenarios.
- **Simplified Setup** — by packaging a full network stack solution in a single case, the setup time and complexity of a deployed network has been greatly reduced. It is no longer necessary to have a large case with multiple systems and a spaghetti style tangle of cables to deliver broadband communications in a remote location. This outdoor rated unit can now be mounted directly on a VSAT terminal, eliminating the need for long, lossy coax cables from the terminal—with Chameleon, you simply run a standard Ethernet cable or use Wi-Fi to access your network.



Power

Modem

VoIP PBX

Router



All the Functionality of an Indoor Rack-Mount  
Full Network Stack Solution in a Single Outdoor Box!

## Chameleon Capabilities

<b>IP Networking</b> Encapsulation Routing VPN Services Security	Fully Featured Enterprise IPv4/IPv6 Router – 1M pps / 3Gbps 802.1q VLAN, GRE OSPF, BGP, RIP, IGMP Proxy IPSec, PPTP, L2TP DHCP/ DHCPv6, Dynamic DNS, RADIUS, Web Proxy Firewall Policies and Groups, Network Address Translation (NAT)
<b>Satellite Modem</b> Downstream Upstream	iDirect X5 Evolution Satellite Modem Standard (other options available) DVB-S2 or iNFINITI TDM up to 17Mbps IP Data Rate Adaptive TDMA or SCPC up to 18.9Mbps Advanced QoS and traffic prioritization End-to-end Uplink power control Optional support for Spread Spectrum waveform Optional support for TRANSEC operation
<b>VoIP PBX</b> Protocols Codec Supported IP Phones/ATA	SIP, H.323/Skinny, IAX G.711a/u, G.726, iLBC, GSM Cisco, Avaya, Linksys, others

## Chameleon Technical Specifications

<b>Interfaces</b> Front         Rear	2x RJ-45 Ethernet Ports Configurable as LAN or Routed Ports Configurable to Provide Power-Over-Ethernet (PoE, 802.3af) Maintenance Port – MIL Connector Used for Software Upgrades / Recovery   Input Power – 24VDC Input Tx Out L-Band Connector 950-1700 MHz, +7dBm / -35dBm BUC power over IFL: +24V, Max 70W Rx In L-Band Connector 950-2150 MHz, -5dBm (max) Composite LNB power over IFL: +19V, 500mA max Antenna Power/Serial/Network - – MIL Connector Provides Power, serial & Ethernet connectivity for communication with auto-point antennas	
<b>Integrated Compute Hardware</b>	Onboard VoIP PBX Optional Wi-Fi Access Point	
<b>Power</b> Input Power	24V DC Nominal 110-240V AC Weatherproof Power Supply Included Maximum Power Draw 240W	
<b>Dimensions</b> Weight Length Width Height	< 8 lbs. 12.5 inches 9.7 inches 3.2 inches	
<b>Mounting Options</b>	Terminal, Rack and Wall Mount	
<b>Environmental / Ruggedization</b> Operating Temperature Humidity Rating IP Rating Shock Rating Loose Cargo Storage Temperature Altitude Storage	-30 to +60C 95% RH (Non-Condensing) IP67 for Water and Dust Ingress Tested to MIL-STD-810G Tested to MIL-STD-810G Tested to MIL-STD-810G MIL-STD-810G	
<b>Certification</b>	FCC Part-15	



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