





# **Simple. Rugged.** Reliable. Quick Operation.

Designed for rugged reliability in the most challenging of environments. Quick one-button deployment provides high-speed Internet and phone connectivity in less than 3.5 minutes.

# **Toughsat XP Features:**

Built for extreme environments
Superior IP-66 environmental ratings
Operates globally in both hemispheres
No software to install
6 watt transmitter with 8 watt optional
Typical seek time to find and lock on satellite is 3.5 minutes
Dish peaking accuracy is within 0.1 degrees with near zero play





## **NETWORK (iDirect Services)**

DHCP --- Yes. Wireless and 4 port Ethernet Wireless Security --- WPA (TKIP) WPA2 (AES) + WEP 64 and 128bit NAT --- Supported by XP Controller integrated router Firewall --- Supported by XP Controller integrated router Port Mapping & Port Triggers --- Supported by XP Controller integrated router QoS, ToS, MAC Address Clone, RIP v1 RIP v2 --- Supported by XP Controller integrated router Networkable client machines --- Unlimited Wi-Fi --- Cisco Linksys 802.11 "G" wireless router Download Speed --- Depends on iDirect Service Purchased Upload Speed --- Depends on iDirect Service Purchased Public IP Address --- Can be included with service

### SATELLITE DISH

Reflector Types --- 0.98 or 1.2 square meter effective area Mount Geometry --- 3 Axis motor drive (elevation, azimuth & skew) Deployment Sensors --- GPS & Tilt Sensor +- 0.1°

# MAXIMUM MOUNT ROTATION

Azimuth --- 410° Elevation --- 165° Polarization --- ±95°



### **Wireless Hot-Spot with Dual Matrix**

The Toughsat TS2 ACU (Antenna Control Unit) has an integrated router and wireless access point. Any wireless capable device within 100' from the vehicle may connect.

#### **RF INTERFACE**

Transmit Power --- 6 watts BUC Transmitter (8 watt optional) Frequency (Ku-Band) --- 10.95-12.75 GHz Receive / 13.75-14.50 GHz Send

#### **DIMENSIONS OF DISH**

Stowed Dish Dimensions --- .98 M 59" L x 39" W x 12" H (150 x 74 x 30.5 cm) Stowed Dish Dimensions --- 1.2 M 67.5" L x 48.3" W x 12" H (172 x 123 x 30.5 cm) Mounting Plate (Both .98 & 1.2 meter) --- 22" X 57" (56 x 145 cm) Base Plate (attached to mounting plate) --- 14" x 16" (35.6 x 40.7 cm) Deployed Max Height --- 1.2m - 68" height / .98m - 52" height (132 cm) Weight --- 1.2m - 133 lbs (60.4 kg) / .98m - 125 lbs (56.7 kg) Boom Radius Sweep 1.2 meter / .98 meter --- 61" / 53" from center 5" min. ground clearance

#### **ENVIRONMENT**

Wind Deployed --- 1.2m - 50mph (80 kph) / .98m -75 mph (120kph) Wind Stowed --- 140 mph (225 kph) Max Operational Temperature (at 100% humidity) --- Operational -20° to 140°F (-28°C to 60°C) Max Survival Temperature (at 100% humidity) --- -60°F to 160°F (-51°C to 71°C) Ingress (Environmental Protection) --- IP66 (can withstand powerful water jets)

#### **POWER REQUIREMENTS**

Dish Controller & Dish Motors (Via 120 VAC) --- 15 watts @ 120V (Max 144 Watt power-on surge) iDirect Modem (via AC 120V to DC 24V @ 5 Amp) --- 75 watts @ 120V (Max 240 Watt power-on surge)